Special INTERPLANETARY ISSUE

See BACK COVER

AMAZING STORIES

JUNE 20c

TRAPPED ON TITAN

by David Wright O'Brien

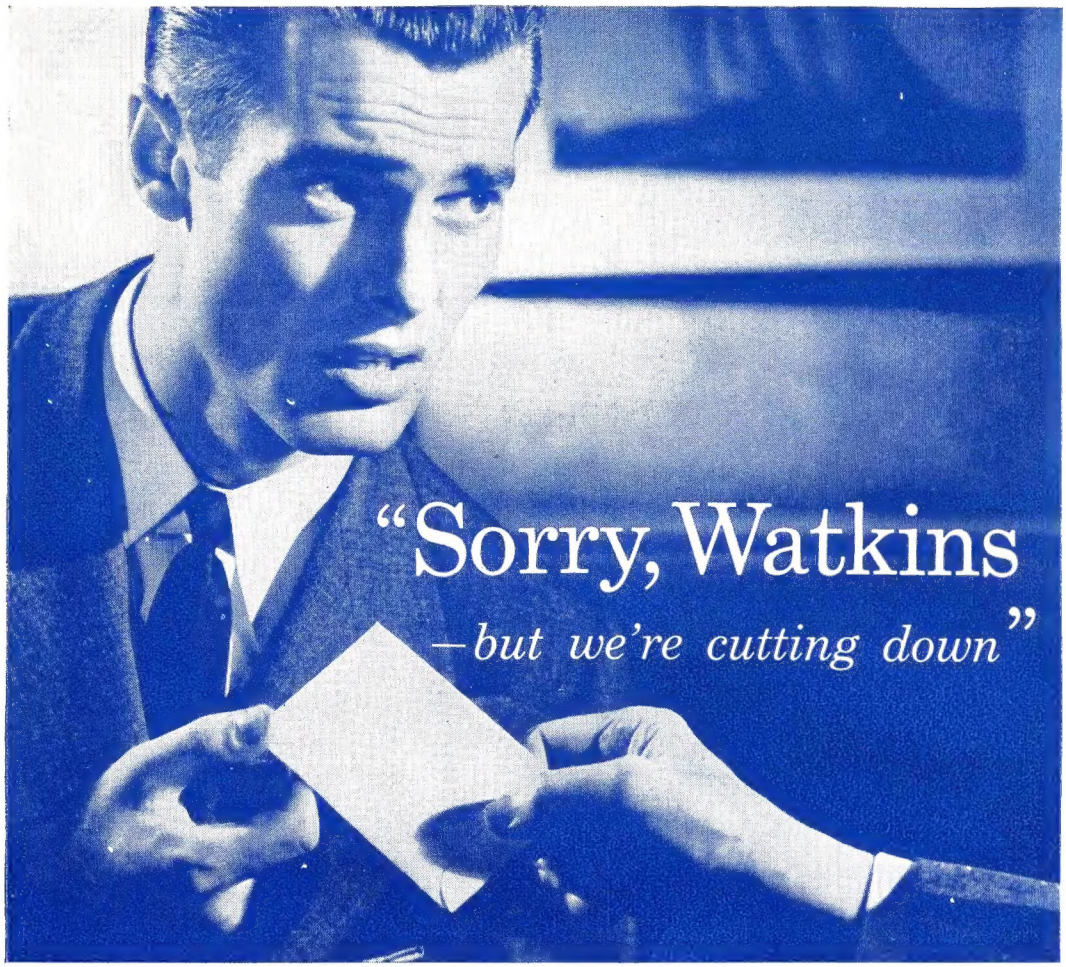
SLAVE RAIDERS *from* MERCURY

BY DON WILCOX

VOLUME 14 NUMBER 6

AMAZING STORIES

JUNE 1940



THAT'S the explanation they gave him, but they were letting him go for another reason entirely . . . one that Watkins didn't even suspect. Without realizing it, he had offended a number of the firm's best customers and they had complained to the boss. It was sort of tragic . . . to have this happen just when he thought he was getting some place. A good man, Watkins—and an ambitious one—but just a little bit careless.*

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NAME.....

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JUNE
1940

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Front cover painting by Julian S. Krupa, depicting a scene from **Trapped On Titan**
Back cover painting by Julian S. Krupa
Illustrations by Leo Morey, Robert Fuqua, Jay Jackson, Julian S. Krupa, Joe Sewell

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AMAZING STORIES JUNE, 1940

Published monthly by ZIFF-DAVIS PUBLISHING COMPANY at 608 South Dearborn Street, Chicago, Ill. New York Office, 381 Fourth Avenue, New York City. Entered as second class matter October 6, 1938, at the Post Office, Chicago, Illinois under the act of March 3rd, 1879. Subscription $2.40 a year (12 issues); Foreign, $3.40.

Volume XIV
Number 6

FOR the first time in AMAZING STORIES' history the front cover *and* the back cover are painted by the same man. Julian S. Krupa appears with a painting based on David Wright O'Brien's "Trapped On Titan" on the front cover; and his own conception of the disaster that might be caused by a giant meteorite striking in the ocean near New York on the back cover. For those of our readers who have requested this popular artist's appearance on the front cover, your editors feel this initial effort will be quite satisfactory. Artist Krupa will appreciate your comments.

HERE'S an amazing bit the evolutionists missed. Two years ago scientists reported a drug that seemed to be to plants what spinach is to Popeye the Sailor. It increased their growth, made them hardier—tough and strong. Now they've discovered a still more remarkable effect of that drug. It produces mutations in germ cells—actual changes in the carriers of inheritance!

Colchicine is the name of the drug, made from a purplish meadow flower which grazing cows have always shunned. (And no wonder!) Its effect is to cause a doubling of the chromosomes, resulting in sharp hereditary changes. And these "freaks" breed true! Not only has colchicine been used to speed the growth of tobacco and tomatoes and increase the size of pumpkins and peaches, but it has produced bottle-neck squashes without necks and —for the future confusion of all gum-chewers—a *lemon*-flavored *spearmint* plant!

It is this last trick—for all we poke fun at it—that is significant. For it represents, literally, *controlled evolution.*

And—*the drug has been found to have the same effect on animals . . .*

Which may put into the hands of one of those animals—man—the future course of the evolution of which he is the highest product—*thus far.*

TAKE a tip, if you *want* to, from the gentlemen of science and steer clear of redheaded girls! The searching light of research has been put on them at last—and now we know why gentlemen prefer blondes.

It is well known that redheads have tempers. But it took a London dentist to discover (in what must have been a very interesting series of experiments) that while blondes lose consciousness under an anaesthetic in at the most 52 seconds, and brunettes in 62, redheads are good for at least a 68-second struggle!

Which is certainly worth bearing in mind, even if you aren't trying to pull teeth.

However, if you *like* to fight . . . this item will still serve a purpose!

A PROBLEM that has plagued scholars for many years is the date when the Egyptian calendar began. The Egyptians kept the world's first calendar, and by it dated man's earliest history. But when did it begin—what, in terms of our present calendar, was the first recorded date, from which all others could be calculated?

Ancient records of that day reveal the position of the Pole Star, tell that the Dog Star rose at dawn and that there was a new moon in the west. How many of those scholars of ours must have wished they could turn back the heavens day by day until, counting as they turned, they found the right configuration!

And then one did just that!

He went to the Buhl Planetarium in Pittsburgh and asked them to reverse their big projectors so

(*Continued on page* 47)

FANTASTIC ADVENTURES
Watch for the BIG JUNE ISSUE in its
NEW SIZE!
- **48 Extra Pages**
- **Easier To Read**
- **Easier to Handle**

You asked for it ! ! Here it is ! With the June issue FANTASTIC ADVENTURES will be presented in the same convenient size as its sister magazine AMAZING STORIES! On sale April 20th.

Slave Raiders from

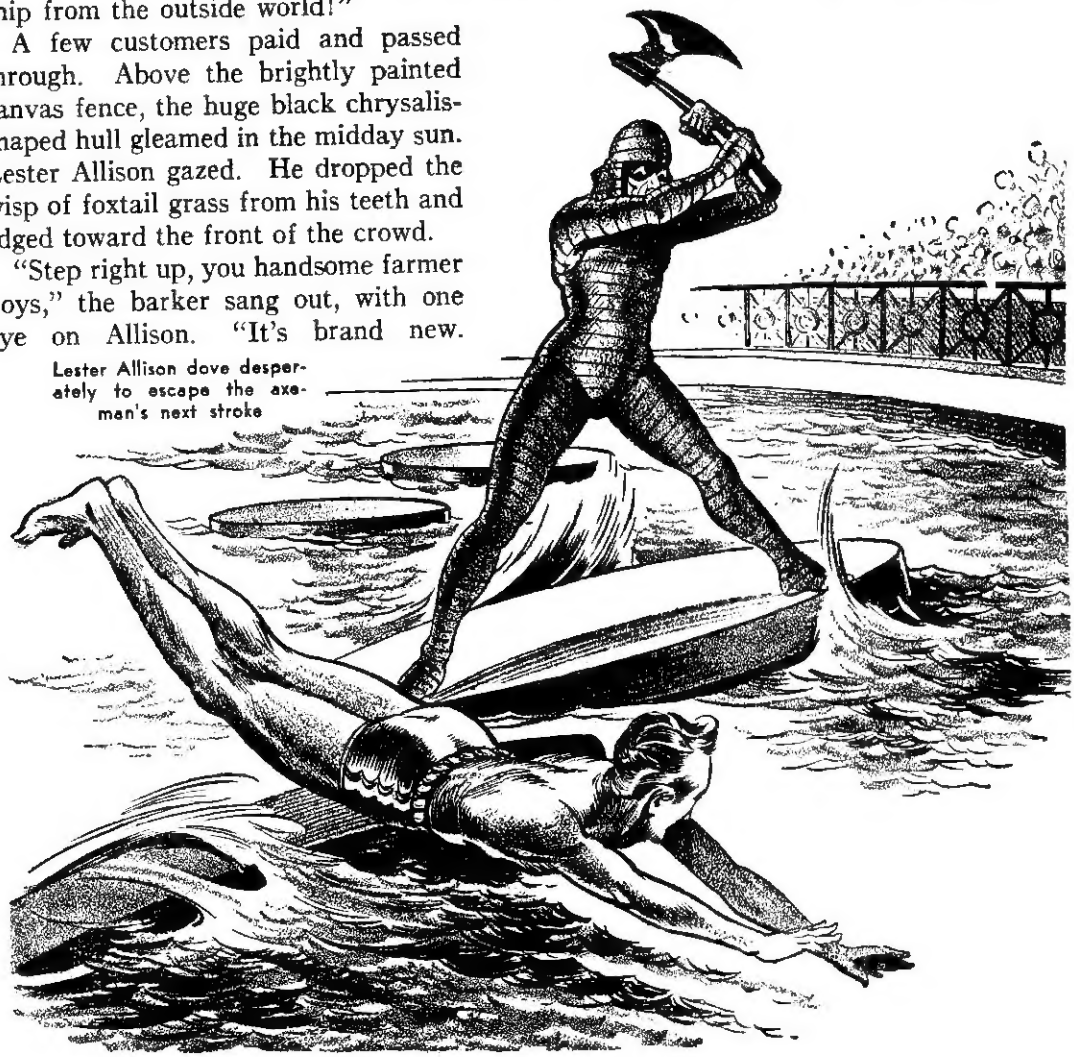
by DON WILCOX

Lester Allison and June O'Neil found they faced more than death on Mercury; the Rite of the Floating Chop

"THIS way, ladies and gentlemen!" shouted the sideshow barker, pounding on a tom-tom. "Open to the public for the first time. The greatest mystery attraction ever offered for fifty cents. A rocket ship from the outside world!"

A few customers paid and passed through. Above the brightly painted canvas fence, the huge black chrysalis-shaped hull gleamed in the midday sun. Lester Allison gazed. He dropped the wisp of foxtail grass from his teeth and edged toward the front of the crowd.

"Step right up, you handsome farmer boys," the barker sang out, with one eye on Allison. "It's brand new.



Lester Allison dove desperately to escape the axe-man's next stroke

Mercury

There's no fake about it. It was found last week in a wheat field and this carnival bought it for your entertainment. Come one, come all, only fifty cents!"

Lester Allison yelled up at the speaker, "Who was in it when they found it?"

"Not a soul, my boy, not a soul!"

"Then how'd it find its way to the earth?"

"Ah, there's the mystery! An empty ship from an outside world, and not a foot-track around it. Come in and get the whole story!"

Lester Allison looked around for someone to take in with him, but saw no one he knew. However, he gave a second look to the pretty girl who brushed past his shoulder.

The girl gave a quick anxious glance back through the crowd; apparently she was trying to get away from someone. She bolted through the canvas gateway without stopping to pay.

"Hold on, lady!" The barker made a pass at her.

"Here," said Lester Allison, slapping down a dollar. "For two."

"Thanks so much," the girl breathed a moment later. Lester Allison followed her through the open airlocks into the black ship.

"The luck's all mine," he said.

"*Mine,*" said the girl, "if he doesn't follow me in—that is," she talked excitedly, "I'm running away—from

home."

They pushed through the cluster of spectators within the ship.

"You oughtn't to wear such a bright yellow dress if you're trying to make a getaway. It caught my eye first thing —it and the yellow hat and your black hair and—"

At a curious smile from the girl Allison concluded he'd better not catalog any more of the items about her appearance that had attracted him. Nevertheless his gaze lingered on her pretty face.

"Pretty young to be running away, aren't you?"

Suddenly her dark eyes were intent on the door.

"Oh—" she began distressedly.

A slender young man came in and looked about furtively. The moment he spied the girl, he marched back to her.

"All right for you, June O'Neil," he said in a surly voice. "Your dad said come home. He meant it, too. He's sober and he's mad."

June O'Neil refused to speak. The young man tried to take her arm. She jerked away and scrunched down in her seat in the ship. He sat down beside her.

"Big-hearted of you," he said sarcastically, "to make me pay fifty cents to come in here and get you."

"You haven't got me," said the girl.

"Oh, *no?* Don't make me laugh!"

"Listen, Ted Tyndall!" The girl's voice was low but every word was packed with fury, and the flash of her dark eyes gave Lester Allison a quickened heartbeat.

"I'm not coming home. That's final. I've had all of home and drunken fathers and quarrelsome boy friends that I can stand!"

"*Zat* so?" Ted Tyndall mocked. Then his eyes took in Lester Allison, who stood, an easy six feet of country-bred manhood, at the other side of June's chair.

"Who's that?"

"I don't know," said June O'Neil quietly.

"I'm Lester Allison." The words were accompanied by a genial smile which met with an expressionless stare from Ted Tyndall.

THE sideshow barker stepped inside the rocket ship and rapped for attention.

"Ladies and gentlemen—" (The group was mostly men; there chanced to be only one other lady besides June O'Neil.) "You are now in the main cabin of a mystery space ship whose secrets not only baffle science, they even baffle me. Mystery Number One: no controls are visible. Mystery Number Two: as I walk to the front of the cabin, the airlocks automatically close."

With a *swish* the doors folded, to become an imperceptible part of the black metal walls.

Ted Tyndall grumbled to the girl, "Now see what you've done. I'm stuck here for a lecture."

By this time most of the eighteen or twenty spectators were seated in the deep-cushioned chairs. Lester Allison started toward a seat as the carnival man continued.

"Mystery Number Three: the black metal of this ship is unlike anything found on this earth—"

Brum-brrr-row-wrr—*wham!*

* * *

LESTER ALLISON awakened with the vague feeling that the universe had jumped a cog.

That dull aching roar—most of it seemed to be in his head. Some of it came through the wall that cramped his shoulder. He was too groggy to open his eyes. What a clamor of

voices! That woman's unrelenting scream—again and again and again. Men shouting and wrangling and fighting. And, near at hand, the voice of that pretty girl, June O'Neil, her low-spoken words fraught with terror. Lester Allison opened his eyes.

"He's alive, didn't I tell you?" the girl gasped.

Ted Tyndall's only response was, "Get me out of here! What the hell—"

"But he's hurt! He might be dying!" The girl's hands tugged at Allison's shoulders.

"Let him rot!" Ted Tyndall fairly screamed. "Get me back to the ground!"

Lester Allison took a deep breath and rolled onto his elbows and knees.

"I'm all right," he mumbled. "A little stunned. That sudden fall—"

His words were lost against the continual screaming. He staggered to his feet. He saw June O'Neil's frightened, imploring face, heard her say,

"No one knows why we took off. No one knows what to do."

Allison's attention turned to the distant sun blazing out of a black sky. It shot through the front cabin window, illuminated the frantic figures chasing through the aisles of the space ship. Some stood at the windows paralyzed with fear; some were fighting. Allison moved up the aisle toward the fight. Three or four enraged men had closed in on the carnival barker.

"You trapped us, you lousy—"

"I did not!"

"Get us back to Earth or we'll kill you!" "What's the game, you crazy—"

"I tell you I didn't—" the barker protested.

"This knife means business!"

The sun flashed from the open pocket-knife. The carnival man backed into a corner.

"Don't be a fool!" Allison snapped as he pushed through to the chief threatener. "Don't—"

HE caught the wrist that held the weapon, bore down with severe strength, and faced the threatener.

"Take it easy, friend."

"Take it easy! This fellow coaxed us in, didn't he? And locked the doors and—" The struggling man's grip relaxed as Allison's steel fingers tightened. The knife dropped.

"Let it lay!" Allison snapped. "And don't be simple. That carnival guy's no space pilot. He's not *that* smart!"

Eyes turned toward the barker, whose jaw dropped with a comical effect. One of the threateners snorted, another chuckled, and the situation eased.

"Besides," Allison went on, "where are the controls? There aren't any. Say—how the heck does this darn thing operate, anyway?"

Naturally no one on board could answer that question. Lester Allison calmly picked up the pocket-knife, folded it and slipped it into the owner's jacket.

"Hey—where do you think we're heading for?" another passenger spoke up.

Allison glanced out the window. "Either Mercury or Venus, near as I can judge. But probably Mercury, because we seem to be heading pretty close toward the sun—an' Mercury's the planet nearest the sun."

"Mercury!" the sideshow barker puffed. "And I only charged you fifty cents. Am I a dope!"

Ted Tyndall made his voice heard. "All right, smart fellow, if you know all the answers, turn us back."

Lester Allison's eyes roved along the walls hopefully. He wondered whether the adjoining rooms might contain the answer. However, some of the men

who had had time to explore shook their heads.

"We've searched high and low," said a one-armed man. "There's food and water and sanitary facilities, but nothing that looks like a control lever."

"Then we're in for a space jaunt," Allison muttered. "We may as well stop howling and make up our minds to it."

The other lady passenger, who had become hysterical, stopped crying for a moment, and then burst out afresh.

Ted Tyndall yowled, "You mean we can't get home tonight?"

"No, dear," the carnival barker mocked, mopping his forehead. "Better drop a note to mamma."

"Shut up, you damned—"

"Sit down!" Allison cracked the command, and Tyndall obeyed. "We've had enough roughhouse. Whatever we're in for, we may as well have order."

"You're elected to keep it," said the carnival barker.

Whether or not the barker meant it for a taunt, Lester Allison took it as a challenge. He looked from one to another of his fellow passengers.

An odd assortment, surely. A fat unshaved tramp, a one-armed man, a poorly dressed Negro, a bewildered old man who was deaf, several men who might have been machinists or farmers or white collar workers.

"You're elected," another of the men echoed.

In that moment Lester Allison forgot he was only twenty-three years old and that most of those years had gone into handling stubborn mules and running farm machinery. His eyes turned toward the woman who stood at the rear window, crying hysterically.

"Does anyone here know that woman?" he asked. No one did. He walked back to her. "Lady, we're going to put you in a room by yourself until you get quiet."

Immediately the terrified crying ceased. Quiet reigned. From that moment Lester Allison's authority was established. Whatever unknown destiny awaited the ship, for the present he was its master.

CHAPTER II

Inhabited Chasms

MERCURY grew like a crescent-shaped cloud bearing down upon the nose of the space ship. By this time the sun was far to the side. Lester Allison watched and wondered how soon the ship would cut its speed. A queer feeling, being tossed through the universe at the whims of—well, of *what?*

The men hovered close about Allison. No one talked. Everything had been talked out. Now there was nothing left but to wait and watch their common fate unfold.

Through Lester Allison's mind surged the memories of recent hours. The hysterical woman's shocking suicide . . . the bottle of deadly poison . . . the erratic note that proved she had been frightened crazy . . .

Allison had taken the bottle and hid it within his pocketbook for safe keeping. As soon as the dead body had been given a space burial, via the disposal chute, Allison had diverted the passengers' morbid thoughts as best he could.

Games had proved the best way. He had had the men make some bean shooters—bean shooting had been a favorite sport in his own boyhood—and he had organized a bean shooting tournament, good for several hours. But as the planet Mercury grew larger, the contestants' nerves became less steady, and

the games had petered out.

Once when most of the passengers were asleep, June O'Neil had come to Allison at the front window to help him keep watch. That hour had burned deep in his memory.

"You aren't a bit scared, are you?" he had said.

"I haven't been since you took over. Whatever may come to us, there's nothing we can do now."

Then the girl had laughed in a quiet confidential way.

"Really, it's almost funny. All these men try to help me keep my courage up, and I think they're worse scared than I am."

Allison had smiled at that, and his eyes must have looked at her long and intently. For he had never before in his life been so impressed by a girl's spirit, nor so stirred by a girl's beauty.

To change the subject he had said:

"Is the boy friend still sulking? Don't worry, he'll come out of it."

June O'Neil had blushed with resentment.

"He's not *my* boy friend!"

Now her words still echoed in Allison's mind as the girl stood silently beside him. Ted Tyndall was at the other side of her, and silent passengers were all around. The great unfathomable mass of Mercury grew closer, half lighted, half shadowed. They were headed toward the line that divided the misty white foam from the dark.

"Stormy over there," said Allison, pointing.

"I could do with a storm," grunted the carnival barker. Anything to break the monotony. . . .

"We're gonna crash! We're gonna crash!" Ted Tyndall gasped the words over and over.

The purring ship plummeted down—down—through the clouds, through layers of blackness and brown twilight and gray fog. Down between banks of mountains, down—

"We're headed for that abyss!"

"*Which* abyss, Allison?"

They watched in awe as the vast crevasses among the mountains gaped larger. The whole landscape was stitched with ragged gashes. Now they recalled their previous discussions about Mercury. How the planet always kept the same face to the sun. How hot it would be—and what the effects of the uneven heating might have.

"SEE any signs of civilization, Allison?" someone asked.

The answer was obvious. On the surface, there wasn't any sign of life.

Was it at all possible that somewhere within those jagged depths there was a mind that contrived to direct their course so skilfully? Down into a funnel of pitch blackness they slowly coasted. Interminably down, like a car on an endless grade. When at last their eyes saw light again, it was artificial light—the dull red of flares reflected from red rock walls.

They stopped.

The airlocks opened. A puff of warm air blew in. Heavy atmosphere was tinged with odors that were at once mellow and pungent. Allison sniffed and took a deep breath. He felt puffy enough to float, the air was so buoyant and the gravity so light.

He led the way out, cautiously at first; then, at the sound of friendly human voices, he dropped all restraints. His passengers filed out after him, bounding and leaping and striding, curious at the sensation of new power in their feet and legs.

They were greeted by a volley of welcomes that figuratively brought them back to earth. Welcomes shouted in good American slang—a puzzling thing, for they had conjured up all man-

ner of perilous beasts and boiling cauldrons in their private nightmares.

But at the shouts of "What's happened back in America?" and "Give us all the news!" and "Who's the president now?" and "Anybody here from Indiana?" all dangers seemed suddenly removed; or at least postponed.

The questions came from a dozen or more half-uniformed men, who passed out handshakes indiscriminately and made the robot ship's eighteen captives feel like prodigal sons. Then—

"A girl!" one of them uttered. All the uniformed men quieted, somewhat in awe, Allison thought, as if a fear or dread came into their thoughts.

"Where's the boss here?" Allison inquired.

An uncomfortable shrug of the uniformed shoulders.

"In his laboratory. He'll drop around and take care of you after awhile."

"Who are you men, and what are you doing here?" Allison demanded.

The men glanced at each other and at their own distinctive garb; they seemed loath to answer. A curiously uniform group; all of them well-built men, youngish, perfect pictures of good health. The red lights gleamed upward across their muscular bodies. They were half naked, like Egyptian gods.

The form-fitting garments about their loins and the mantelets on their shoulders were of fine mesh woven from some unfamiliar red metal. Most of the brilliant mantelets were decorated with vertical white stripes—one over each shoulder, or in some cases two.

"We're entitled to an explanation." Allison bit his words off forcefully. "We've been taken against our wishes."

A man with double stripes over his shoulders answered, and there was a note of pathos in his voice.

"It is not our part to make explanations. We are—slaves."

"SLAVES—of *what?*"

"Of the Dazzalox."

"The dazzle—*what?*"

"The Dazzalox. The natives of this underground world. We were brought to Mercury by the robot ship, the same as you. You will soon be sold as slaves too—though the market is slumping just now, owing to the current deaths of two Dazzalox potentates.

"But no matter what happens to the market price," the man spoke as matter-of-factly as if he had been discussing the price of milk, "you'll soon be slaves too."

"The hell we will!" Allison's belligerent attitude only evoked smiles from the mantled men. They recalled that they too had bristled with resistance when they first came.

Allison's men began to mutter with anger, and their young leader voiced their sentiments.

"See here, we've come here by mistake. We need food and water, and a chance to rest before we start back."

At this all of the slaves laughed. Then the double-striped spokesman said:

"Don't mind us. We know just how you feel, but you don't realize what a trap you've fallen into. Take it easy and you'll be better off. Make yourselves comfortable on those circular benches and we'll see that you get some food and rest first thing. But as for starting back—forget it."

The exotic food might have been hothouse products: fruits and vegetables and nuts—rich blends of flavors and aromas and colors. Allison wasn't surprised that some of his men couldn't eat. The aged deaf man was definitely ill. Ted Tyndall had apparently lost all his appetite.

But June O'Neil ate with relish. The side-show barker and the man who had once threatened him with a knife feast-

ed and joked together like old cronies on a picnic.

A deep-toned musical note resounded through a hundred distant caverns, and some of the slaves started away. Lester Allison finished his meal and started after one of them. A few light-footed bounds and he caught up.

"My name's Smitt." The man with the double stripes on each shoulder offered a friendly hand. "You want to look around, do you? I'm off duty now. On my way to the funeral—or rather funerals. Two of them. Big events on the Dazzalox social calendar. They love their funerals—or *farewells,* as they prefer to call them— Sure, come along."

The deep-throated tone sounded again through the maze of red caverns. Allison glanced back at his party. They were stretched out on benches. Apparently they were in no danger. A few one-stripers were walking among them.

Smitt led the way over a red metal bridge that crossed a tiny gushing rivulet many feet below.

"We leave the Red Suburb here," Smitt said. "From this point on is the civilization of the Dazzalox —a dying race, and the proudest, haughtiest, most ostentatious sons-of-guns you ever saw. We slaves retreat to the Red Suburb in our time off, but most of the time we're at work here in the main city. Notice the change of colors?"

Allison saw that the red rock ended. Ahead were higher walls that stretched upward like fortresses of tightly packed columns—greens and blues and blacks. Apparently nature's tricks of heating and cooling accounted for these formations.

"A fascinating staircase there," Allison remarked.

"Thousands of years old, they say. My owner lives up there."

ALLISON'S eyes followed the magnificent sweep of the stairs toward the spacious shelf in the wall toward the roof of the cavern. It was too lofty for one to see into the home, but the rows of torches burning along the upper levels indicated a wealthy and pretentious built-in mansion.

"My owner's name is Naf," Smitt continued. "Rich and lazy. Sleeps so much that I have a lot of time—more than most of the slaves."

"Is Naf retired?"

"Rather! Everyone's retired here—except us slaves. And even we are used more for displays and ceremonies than for hand work. Of course we gather and distribute the food. But the necessities of life were so well planned a few centuries ago that things almost take care of themselves —such as the gardens and underground orchards. Things live an interminably long time here—plants and people both."

They hiked along the corridors and riverside streets at a good pace. All of Allison's senses were on the alert, but he had yet to see his first Dazzalox.

He asked, "What do they do to pass their time?"

"You said it, brother!" Smitt laughed. "Well, not very much. They polish up their old traditions and have funerals and bloodless wars and bragging parties and feasts. But they don't *do* anything—except eat and sleep. I've watched them for thirty years—"

Allison gave a skeptical look, for Smitt didn't appear to be more than twenty-five.

"For thirty years," Smitt repeated, "and when I stop to realize that the older ones have gone on this way for centuries, I say to myself, 'No wonder they're ready to walk into their graves with their eyes wide open.' "

Bewilderment was piling upon Allison almost too fast. By this time he

had viewed six magnificent staircases cut in deep-colored rocks and polished from ages of use. His eyes were dancing from the rows of luminous purplish-white lamps that flanked the floorways. His ears rang with the untiring echoes of the funeral gong, drowned now and then by spouting waterfalls. Now he followed up a long narrow clay ramp, at last to look down upon a breath-taking sight.

"A stadium!" he gasped. "An underground stadium!"

"They call it the Grand March."

From above the tiers of seats they looked down upon the wide-paved parade ground which ran from end to end like an elongated gridiron. The whole structure filled a vast underground valley.

"My stars! There's room for two or three hundred thousand people!" Allison exclaimed.

"And only five thousand to fill it. A dying race. The native laborers died off a few centuries ago. The gardens needed so little care that the laborers became a superfluous class, who finally either died from misery or from trying to migrate under unfavorable conditions.

"Well, there's your five thousand," Smitt pointed down to the lower, sparsely filled tiers, "waiting for the first of the day's funerals."

Allison viewed the scattered audience incredulously.

"But those are people—humans."

"No, they're Dazzalox," said Smitt. "You'll notice a pronounced difference on closer inspection."

THE flame of excited curiosity in Allison leaped up.

"They stand and walk and sit like ordinary people. A little more spring and hop to their step—but the gravity could account for that. Do they have human natures?"

"That depends upon what you mean. Lots of things pass for human nature," Smitt observed. "Most of it, I've noticed, has a lot to do with animal nature. These Dazzalox are as simple as children and as savage as beasts. Here come a couple of them now."

The two men slipped back into a convenient hiding nook, from which they could watch at their leisure without having to make any explanations for Allison's presence. The two Dazzalox, a male and a female, ascended the steps to take seats in the upper tier.

They were ornately dressed in highly colored mesh clothing. They were stockily bodied, but their bare legs were thin and sinewy, and their hard crusty bare feet were as ugly as an insect's.

"Kub-a-zaz-ola-jojo-kak—"

Now Allison saw his face. The male Dazzalox spoke in a metallic voice. It was an expressive face, but it looked as if it were made out of yellow chalk. The female's face was also of a single solid color, a slightly paler yellow. The female scolded like a bird.

"Is that a fair sample?" Allison asked. "What's wrong with their hands and feet?"

"Nothing. Adapted to living in rocks," said Smitt. "Did you notice their double eyebrows? Eyebrows below the eyes as well as above. I suppose their ancestors in the dim past enjoyed sunshine, but now most of their light comes from near the floors. *Lukle* gas torches. They've got *lukle* gas to burn, and plenty of other gases for other purposes."

"What are they saying?"

Smitt listened for a moment. "They're talking about the funeral that will follow this one. It's high time for old Jo-jo-kak to die, they say, because he's forty-five hundred years old."

"Forty-five hundred!"

"That's not as bad as it sounds, because we get a year here for every eighty-eight Earth days. By Earth time he's more than a thousand years old."

"But a thousand!" Allison searched his informant's face to make sure he wasn't being kidded. "Say, do they have old age pensions here?"

Smitt laughed. "If they did most everyone would be on the rolls. Long lives and a low birth rate are the custom here. However, it isn't unknown for Dazzalox who are several hundred years old to still have children. Old Jo-jo-kak, for instance. Listen—"

The Dazzalox couple were still talking about old Jo-jo-kak, and Smitt interpreted their words.

"The language is simple. You'll get onto it in no time. Unless, of course, you decide to—er—go back right away," Smitt added with a wink.

"Sarcasm never ran a space ship," Allison retorted. "Maybe that's why you're still here."

SMITT laughed again, and Allison realized that in the past eventful hour a bond of friendship had sprung up between them.

"And speaking of space ships," said Lester Allison, "there's s o m e t h i n g that's burning me up. How the devil can this dying race of powdery-faced Dazzalox, who evidently don't have electric light, or automobiles, or radios —how the devil can they have robot space ships that slip out and gather up a load of Earth folks and chase back again like a homing pigeon?

"It's inconsistent. There's a loose screw somewhere around here, and it's beginning to rattle in my ears worse than that funeral bell."

"Ah," Smitt sighed. "You're hot on the trail of the *brains* in this set-up. There's brains in these here hills, all right. Sometime soon I'll give you a look back of the scenes, and you can draw your own conclusions."

Allison pondered his friend's words only to find that the mystery deepened.

The brains of this set-up?

Allison recalled an answer some slave had given him when he had just arrived: "The boss is in his *lab*."

Well, w h o e v e r the boss was—whether man or beast or robot or spirit —Allison resolved to see him.

The funeral gong silenced and the first of the farewell processions came into view.

CHAPTER III

The Symbol of Death

THE central figure of the funeral procession was an old male Dazzalox with long yellow hair who stood in the center of a moving platform waving his arms at the crowd.

"Where's the corpse?" Allison asked.

"That's it—the old man waving his arms. He'll be a corpse in a few minutes."

Allison was aghast. "But why?"

"Because this is his day to die."

"You mean he *has* to die, because it's his turn or something?"

"He *wants* to die. He's lived until he's tired of living. There's no sense waiting until you die a natural death here in Mercury. It just isn't being done. Voluntary deaths are getting more popular right along because—well, after all, it's the one way the Dazzalox have of escaping boredom.

"The old man set the date for this event a year or so ago. The same with Jo-jo-kak. It's the only pleasure these fellows have left on their social calendars."

"Pleasure?" A l l i s o n muttered. "Darned if I can see how death could be a pleasure!"

"You aren't a thousand years old," Smitt retorted wisely. "But you can see for yourself that it *is* a pleasure for that old gent."

The procession was directly below them now. The crowd cheered in high chirping voices. Here and there the old man had the procession stop while he divested himself of a short speech, with many a vigorous shout and gesture.

"All memorized and practiced in private," said Smitt. "My owner, Naf, is working on his farewell now, though he hasn't set the date yet."

The color scheme of the procession, Allison noticed, was simple but striking. The old man with the yellow hair was dressed from head to foot in a flowing costume of bold black, with a black mask and black and white-striped ankelets.

The moving platform was painted in black and white bars, and the human slaves who bore it wore mantelets with black and white stripes.

At last the procession came to a stop at the remote end of the Grand March, at a door in the rock wall also marked with *black and white vertical bars*.

"Those stripes must be the symbol of death," Allison remarked.

Smitt nodded. "The door leads into a long tunnel that is filled with death gas. Another bounty of nature. Death gas is plentiful and it provides a painless way to die. Any slave would be happy if he only believed he would eventually die by death gas, rather than by some Dazzalox violence—the Floating Chop, for instance."

The old man's last moment had come and he apparently gloried in it. He gave a magnificent bow and, amid a flood of farewell cheers, leaped nimbly down from the platform and marched to the door. A slave opened it, the old man went in and the door closed. . . .

"What happens to the body?" Allison whispered after silent minutes.

"Bountiful nature comes to the rescue again. The body remains in the tunnel untouched, but twice each year —that is, every forty-four days, Earth time—the boiling seas from the sun side overflow through all these caverns and sweep everything away. The people's homes, of course, are all high above the flood level, but the river beds and streets are washed clean."

ALLISON abruptly rose. "I'm going back to the Red Suburb," he announced.

"Come back in an hour or two," said Smitt, "if you want to see old Jo-jo-kak's farewell. In fact you might as well wait right here. There won't be anything going on until it's over. What's the hurry?"

"I just remembered something." Allison gave a wave and hurried off.

Smitt followed after him. "You'll get a kick out of old Jo-jo-kak. He's a bit eccentric. . . . Allison, what the hell—"

Allison bounded down the long clay ramp with Smitt at his heels.

"That black and white door," Allison panted, and kept on running. "I just remembered there was a door marked like that back at the Red Suburb. My folks don't know the danger."

"Wait, let me explain!" But Smitt was losing ground. However, Allison missed the way and came to a stop in a dead end, and then realized that his guide was still indispensable.

"That striped door is safe; that is, none of your gang will get in there *by mistake*. It's there for a purpose."

More explanation was demanded by Allison's searching gaze. Smitt tried to wave the matter aside.

"Hell, quit worrying about things. *You're* well built and *you'll* be a cinch

for the slave market. No striped door is gonna cross *your* path."

Allison stared. "What are you driving at, man?"

"Well, you may have noticed that all of us slaves fall into a uniform physical type. That's been a tradition since the first load of slaves came in—about forty years ago. The boss found out that the Dazzalox like well-built young American men, so that's what *he* gives them. People who don't fall into that classification are—er—spared the humiliation of becoming slaves."

"How?"

"By a painless process of elimination —the striped door. It's really a kindness, in comparison to—"

"Kindness!" Allison roared. He grabbed Smitt by the arms and glared at him. "They'd better not try any *kindness* on *my* group!"

Smitt smiled calmly. "Relax, Allison. Don't misunderstand. I'm not hard-boiled. Down here the fates are different. I've learned to accept them. You'll have to, too."

"All right. What's the bad news?"

"Well, I glanced at your group. It was plain as day that there were five—er—unsuitable ones out of your eighteen. By this time they have been culled out—by way of the striped door."

"Which five?" Allison shouted.

"The deaf old man, the Negro—but only because he was sick; the one-armed man, the fat tramp, and—of course—the girl."

Down the cavernous lane they flew, Allison ahead, Smitt sailing after him in tow like a kite. When the red bridge came in sight, the gasping slave was left behind. Allison raced into the Red Suburb. A single glance at his group lying around on the benches, and he knew at once that some were missing.

"Where's June O'Neil?" he blurted to the first person he reached.

"Whose business is it?" Ted Tyndall retorted with a jealous smirk.

"Where is she?" Allison clutched the fellow by the shoulder.

"Damn it, what's the difference!" Tyndall snarled. "You're nothing to her. Lay off—"

TED TYNDALL sprawled to the ground without ever knowing what hit him. Other members of the party hurried up to Allison.

"She and some of the others went off with a fellow in a shiny white suit—a sort of big shot—"

"Which way?" Allison fairly screamed.

"Up toward that striped door."

The men swarmed after Allison as he raced up the red rock path. He bounded against the striped metal panel. It opened inward. Blackness. Blackness and a strangely sweet smell like old flowers pressed in a book.

"Your flashlight," Allison barked at one of the men.

"It's dead."

"Then keep the door open for me—but don't breathe any of the air."

Allison took a breath, entered, groped along the jagged walls, lost himself in the blackness. In two minutes he was back, bearing a dead body. It was the one-armed man.

He caught his breath and rushed back in. Another man followed him. Two minutes—three— The other man returned empty-handed. Three and a half minutes—four—Allison stumbled out again, also empty-handed. He started to speak but fainted instead, and for a minute or two he was out.

"It's a death trap," the other man gasped. "We located three more bodies —the old man, the Negro, and fat Tubby. Didn't find the girl, did you, Allison?"

Allison shook his head. He breathed

heavily, got up on his knees.

"I'm going back," he muttered.

"Give yoursef a rest," said the man who had accompanied him. "Let someone else go."

The man's eyes turned to the sideshow barker, who quickly excused himself.

"I've got a weak heart," said the barker. "Let Tyndall go. He's got a crush on the girl."

Ted Tyndall sneered. "The girl ain't in there."

"How do you know?" Allison growled, pulling himself to his feet dizzily.

"I saw the big shot lead her on down that path," said Tyndall.

Allison bit his lips to keep from flying into a white rage. He looked down at the corpse of the one-armed man.

"Leave the other bodies where they are," he said. "I'll be back later."

"And where are you going?" asked a slave with single stripes over his shoulders. Allison made no answer.

The one-striper snapped in an authoritative tone, "I have orders for thirteen new men. Get yourselves into these slave uniforms and memorize this list of rules. You are to be on the floor of the sales cavern in time to catch the funeral crowd. You've got less than two hours, and these rules are complicated, so get busy."

Allison grabbed the pile of slave uniforms and hurled them across the red rock floor.

"I'll take this up with the boss!" he said. "Where do I find him?"

"At the end of this path," said the one-striper, "but it's your neck."

CHAPTER IV

A Female Slave

"THE brains of this set-up," Allison muttered to himself as he sprinted. "A look behind the scenes—"

He stopped. Not twenty-five yards ahead of him the red rock path abruptly turned into an ornate entrance in the rock wall. Under red lights, the red stone carvings of the doorway glowed like a filigree of burning vines.

"The boss likes luxury," thought Allison.

Hum of motors came from within the place, smooth rhythmic sounds, music to one who appreciates fine machinery. A strangely discordant sound came from somewhere overhead. A ragged *tap—tap—tap* on stone. Allison looked up.

His eyes beheld a solitary figure coming down a zigzag path. Where the trail came from Allison had no idea, but obviously it connected some other part of the maze of caverns to this red rock sanctuary of the big boss.

The solitary figure was a stone's throw above Allison, with several switchbacks to go before he got down to the red rock level on which Allison stood. Though he tapped along at a lively gait, apparently he was an old, old man—no, a Dazzalox.

His yellow face was wrinkled. His coppery hair hung long and uneven, his double eyebrows almost concealed his tiny eyes, although his head was bent downward. The tapping came from a bright copper-colored sword which he used as a cane.

All this Allison caught in a glance. "*That* can't be the big boss," he muttered. He ran on.

RING BEFORE ENTERING

Allison was in no mood to heed signs. He had a single purpose: to make certain June O'Neil was alive and safe. He had thrown all caution to the roofs of the caverns. Now he dashed through the doorway and down a long glass-walled corridor. To his amazement this

place was electrically lighted and had all the look of a gigantic subterranean power station.

"June!" he shouted. "June O'Neil!" His voice sang off into the hum of machines. He ran past room after room, and the passing sights fairly took his breath. Everywhere were manifestations of power.

"June O'Neil!"

No answer but the grinding of automatic engines came back, rolling out yards of shining metal goods. Ladles pouring molten red metal into ingots. Presses stamping out silvery ornaments. Charts of space routes flashing in neon. Automatic jewel cutters playing with precious stones under violet spotlights. Allison raced on. His voice rang weirdly.

He stopped to listen. Footsteps sounded dangerously behind him. He whirled to see a one-striper swing a club at his head. He went down.

His consciousness flashed back almost at once—before his captor got his hands and feet tied, in fact—but he was too helpless to struggle.

"Awake, eh? Hate to do this, brother," he heard the human slave mumble, "but orders are orders. Kilhide doesn't tolerate any rebellion."

Allison grunted sourly. "That *would* be his name."

"The big boss'll have something to say to you. And then, if I was you, I'd get into a slave uniform like I was told."

The slave picked up Allison bodily and carried him back through the corridors to a brilliantly lighted room.

"Here's your rebel, Mr. Kilhide," said the one-striper. He eased Allison to the carpeted floor. Then at a flick of the finger from the big boss in the farther end of the room, he went out.

ALLISON got his slightly blurred eyes into focus—and gasped. There before him sat the most imperious, the most uncommonly handsome individual he had ever seen. Dark, luxurious hair, swept back rebelliously over a sensitive brow. Chiseled, somewhat disdainful nostrils. A smooth, creamy brown complexion that was yet a little too smooth, a little too bland. And large brown eyes, intelligent, magnetic, which sparkled even in repose—but sparkled with malice.

If Kilhide heard Allison's little gasp of astonishment, however, he ignored it completely. It was only too evident that there was someone or something in the other end of the long room with which the big boss was preoccupied. With the man's first words Allison understood.

"Now, Miss O'Neil, you realize how lucky you are that I brought you here instead of sending you with the others," said the smooth oily voice.

Lester Allison gave a deep sigh. To know that June O'Neil was alive was cooling water to his thirsty soul. He could breathe again. The knots cut his wrists and ankles, his head hummed with pain where the club had struck him, but these things were trifles. June O'Neil was alive!

By squirming about Allison could see her at the farther end of the sumptuous parlor. She was looking at him; her dark eyes glistened and her firm breasts heaved. Allison could hear her strained breathing.

"Don't mind that wretch, my dear," said Kilhide, jerking a thumb toward Allison. "I get a problem child or two with every boatload. One snap of my fingers and they line up. More coffee? That's my own brand."

Allison had hated this man enough, sight unseen. But to find him a devilishly handsome American, gloating in riches gained from selling his fellow

Americans into slavery—and now trying to twist this innocent girl around his little finger—well, it was enough to inflame Allison to an orgy of murder. But just now all he could do was listen. The big shot apparently wasn't aware that his unctuous voice carried through the room.

"As I was saying, Miss O'Neil—June, if you don't mind— my fabulous wealth and my unlimited powers have come to me because I'm smart. I know exactly how to play ball with these wealthy old Dazzalox potentates. From the day I cracked up with my trial rocket ship fifty years ago, I've played to their whims like nobody's business. Because I'm smart."

"I see," said June O'Neil, trying not to let her eyes drift toward Allison.

"I give them everything they want. They give me everything *I* want. At first they were going to make a slave of me, but I convinced them they could have many more slaves if they would help me build a ship. I lost my first robot ship, but the second brought home the bacon."

"Why didn't you go back yourself?" the girl asked.

"To the earth? Hell, what's the earth got that I haven't got! Nothing but more stupid people."

"Oh." June shuddered to think that any human being could be so saturated with hate and egotism. She wanted to run, but she only sat, frozen, keeping one eye on Lester Allison.

"I suppose you think I can't keep up with the earth's scientific developments, living alone down here among these numbskulls," Kilhide said.

June didn't answer. She was terrified, and obviously there was no way to break out of this situation.

"Well, you're wrong," said Kilhide. "I get new ideas from every boatload of slaves. There are always some newspapers in the men's pockets, and scientific discoveries are now regularly reported in the press. Whatever the earth is building I eventually find out about—and duplicate. And do a better job of it, because my various red and black metals are superior to any steels or tungstens on the earth. Besides," the man stroked his little trick mustache, "I'm smart."

"Mr. Kilhide," the girl rose and spoke boldly, "do me a favor."

"I'm doing you a favor, child. I'm going to marry you."

THE girl shrank back to her chair. "What more could you ask?" said Kilhide with an arrogant smile. And he was that egotistical that he meant it.

"Send me back to the earth," said the girl weakly.

Kilhide snorted. "Earth! That's a helluva thing to ask! You told me you ran away from home. Well, you're away. Stay here. It's healthy. You can live for hundreds of years. The food gives you what you need to keep young. I've got everything you need" —he made an elegant gesture toward the luxurious furnishings of the room —"to keep you happy. And I mean, happy."

He came close to June and tried to gather her fingers into his hands. She drew back. He laughed.

"You're afraid, child. You needn't be. Those rock-sleepers, the Dazzalox, won't know you're here, for they rarely come back to this end of the caverns. And the human slaves won't dare bother you."

Kilhide broke off his rhapsody to cast a glance at Allison, whom he had considered to be out of hearing.

He growled, "What are *you* gawking at?"

He flung a mesh-covered sofa pillow at Allison's head, then strode down the

room and painstakingly packed it against the other's face with a disdainful foot.

"I'm doing you a favor, June," Kilhide resumed in his confidential voice when he had walked back to her. "Of all the women the robot ship has brought here, not a one has been allowed to live more than a few minutes after arriving. In fact, the Dazzalox have never even seen an Earth woman."

A ragged *tap-tap-tap* sounded dimly from a corridor.

"Strange you didn't sell women for slaves," June O'Neil said a little sharply.

"Not at all," said Kilhide, too conceited to note the sarcasm. "Men have made perfect slaves. No use upsetting an established system. The Dazzalox like their traditions let alone."

"Moreover," the speaker again stroked his trick mustache, "since none of the women who came were both beautiful and intelligent, I've saved myself any annoyance by quickly disposing of them—*painlessly.*"

The girl winced. The *tap-tap-tapping* grew closer. Kilhide was too intent upon his purpose to notice it.

"You think me cruel, I suppose, but you're wrong. I'm just being practical. . . . More coffee?"

"Please. It so strengthens one, you know," June almost hissed.

Kilhide started toward an adjoining room for more of his prided beverage.

"By the time I return, I expect you to say that you are ready to marry me."

"The answer will still be 'no'," said June O'Neil. "But definitely."

Kilhide flushed. "May I politely remind you of the striped door we passed a short time ago?"

June fought the surge of anger within her.

"You may," she said shortly. "But first—the coffee, please?"

By this time Allison had shaken out from under the metallic pillow sufficiently to see the red flush that leaped to Kilhide's face. That haughty individual hesitated uncertainly in the doorway, then stomped into the adjoining room.

On the instant June was at Allison's side, tugging at the tough cords that bit into his wrists. She wrenched her fingers, but the cords were stubborn and time was too short.

"Don't cross him," Allison whispered tensely. "He murders as easy as he lies— *Get away!*"

JUNE sprang away and appeared to be innocently examining a picture when the white-suited figure came back into the room. At the same moment a grizzled old Dazzalox with ragged, copper-colored hair hobbled in from the corridor.

"Jo-jo-kak!" Kilhide exclaimed in a disturbed voice.

Allison held his breath. Though he knew that the human slaves feared the savage Dazzalox as one might fear a cruel or stupid employer, it took that startled tone of the big shot himself to convey the full value of the Dazzalox prestige.

"This is an unexpected pleasure!" Kilhide's enthusiasm rang falsely. He quickly changed his mood to one of gentle reprimand.

"You shouldn't be here. Today is your funeral—your farewell. Did you forget?"

"Ak-ak-ak!" the old Dazzalox chuckled hoarsely. Then in broken English he announced that he had come to tell Kilhide farewell personally. He hadn't learned the language for nothing, he said.

Kilhide met him with a handshake and started to lead him back toward the corridor, but the wizened old Jo-jo-

kak stood in his tracks and continued to shake hands—continued unconsciously until Kilhide pulled away. For Jo-jo-kak's beady little yellow eyes were now upon June O'Neil.

His eyes glittered and his double eyebrows blinked.

The rest of the world could roll into the boiling seas, but Jo-jo-kak's eyes would not unfasten from what they were seeing.

"Who be this?" he grunted.

"You'll have to hurry to get back for your farewell," said Kilhide nervously.

"Who be this?" Jo-jo-kak growled, shaking his copper locks.

"I—I'll have some slaves take you back to the Grand March," Kilhide evaded. "You're due now, and it's a long walk for you."

"WHO BE THIS?" The quaking old voice attained a genuine roar. The wrinkled old creature swaggered closer to the girl. He patted her black hair and her full graceful arms with his unsteady sword.

"Female slave?" he yelped.

Kilhide reached for a bell and rang for assistance.

"So! Female slave," Jo-jo-kak crackled. "Ak-ak-ak!"

He dragged the sword down along the side of her dress, down to her shapely ankle. June walked back a step. He followed, and with his crude hand he caught her hair. She cried out. He jumped back with a ridiculous laugh.

"Ak-ak-ak! I want her!"

"Don't be silly," Kilhide snarled. "Go on back."

"I buy her. How much?"

The sweat broke out on Kilhide. "Buy" was a magic word between him and the Dazzalox. It was the magic that fixed things for him, and saved him from the Dazzalox' savage moods.

"You can't buy her, Jo-jo-kak. You're leaving. This is your day to die."

"No! I want her!"

With that the old Dazzalox potentate broke into a violent jabber that neither June O'Neil nor Lester Allison could understand, but from Kilhide's growing perspiration they knew that Jo-jo-kak held the high cards.

Some one-striped slaves arrived. The old Dazzalox turned to them and restated his case with renewed vigor, waving his copper-colored sword. Then he hobbled back to Kilhide and shouted in an accusing tone:

"Maybe *you* want her, so? Yes? She yours?"

"Yes," Kilhide hissed desperately.

"No!" cried June desperately. "Not in a million years!"

"Ak-ak-ak!" the old Dazzalox exulted. "She say she *not* yours! Ak-ak-ak! *I want her!"*

THE sting of the girl's open rejection blasted Kilhide's composure. He bit his words hatefully.

"Jo-jo-kak, she is your slave. No, I'm not selling her. I'm making you a gift. She's yours. See?"

Jo-jo-kak went into a weird spasm of laughing and dancing and shouting. Then suddenly he stopped and turned to a slave.

"Go," he shouted. "Tell them there is no farewell. I do not die today."

CHAPTER V

Underground Penthouse

THE slaves chased away with the strange command Jo-jo-kak had uttered, and the wizened old Dazzalox strutted out to the corridor, the proudest creature in the chasms of Mercury.

He accosted another slave and ordered him to go find his wife and bring

her here at once. For June O'Neil had forcibly stated that Jo-jo-kak's wife* would have to accompany them, or she would refuse to go—a bit of swift thinking and stout bluffing on her part.

By this time Allison, who had tried in vain to break his bonds, gave way to a burst of temper. He shouted stinging words at the suave, handsome scientist, which under the conditions was all he was able to do. Kilhide was in no mood to take it. He responded with sharp kicks at Allison's prone body.

"Go ahead and kick hell out of me!" Allison snarled defiantly. "That ought to make you very happy. You're just a rat—selling your fellow humans!"

"My customers seem satisfied," Kilhide sneered.

"And that's all you care about! Giving those savage Dazzalox anything they want, just so you can have more power and wealth. You haven't an ounce of feeling for anybody but yourself!"

"And why should I have?" Kilhide snapped. "I am a master scientist. To me, all the difference between you average humans and these underground savages is less than the difference between two heads of cabbage. And I hate cabbage."

"Why, you damned, cynical—"

Another stout kick. "I'd kick your face to pulp if it wasn't for losing money on you. Get up, now!"

Kilhide hoisted his prisoner into a chair, and as he did so he gauged the well-developed muscles of the young farmer's arms and shoulders.

"You damn fool, you could be a first-class slave if you knew on which side your bread was buttered."

An excited one-stripe slave broke in upon the scene to report the pandemonium of the funeral crowd. Evidently five thousand Dazzalox at the Grand Parade had received the greatest shock of many a century.

A few minutes later, many smartly and colorfully dressed Dazzalox, men and women, crowded into the room, chattering and wailing at Jo-jo-kak. Allison couldn't make much out of the dreadful chaos, but he was sure they were upbraiding the old potentate because he had walked out on his funeral. Jo-jo-kak laughed at them, and brandished his sword, and strutted around defiantly.

All the while, June O'Neil had been out of sight, having retired to an adjoining chamber to retouch her hair and make ready for the strange adventure. Now she entered the room.

At the sight of her, the group of blustering Dazzaloz fell silent and edged back into a circle all around her. They gazed as if they were looking upon something unreal, something they couldn't quite believe.

But when Jo-jo-kak's wife finally arrived, and she and her centuries-old husband actually led this creature out to the corridor to take her home with them, the Dazzalox were convinced that this thing of beauty was a fact. Some of them, indeed, could even begin to understand why old Jo-jo-kak had neglected his funeral.

CHATTER and cheering and the tapping of Jo-jo-kak's sword melted into the hum of machines. Kilhide called a one-striper.

"Have the mechanics service the robot ship for another trip," he ordered.

Then he turned to Allison. "Oh, yes, *you!* I was about to kick you in the face, I believe. Well, I haven't time now. But perhaps by this time you realize that the smart thing for you is to get into your slave clothes."

"What," said Allison deliberately,

* On Mercury the Dazzalox permitted themselves wives, a privilege denied the slaves.—Ed.

"would you do if you were in my shoes?"

Kilhide flushed, but there really was no answer he could make.

"Take him outside and cut his bonds," he snapped at the one-striper. "See that he and the others get ready for the market. Though heaven knows," he added as the slave dragged Allison out of hearing, "that the market is headed for a slump—the male market, anyway."

* * *

MANY hours after Allison, dressed in his red one-stripe outfit, had been stationed on the sales floor of the slave cavern, he looked up to find his old two-stripe friend, Smitt, grinning at him.

"So you haven't been sold yet!" Smitt exclaimed.

"None of us have been sold," said Allison. "Scores of potentates have examined us from head to foot, and made us prance and climb rocks and repeat Dazzalox words, but they didn't buy. Kilhide marked us up, marked us down, and down some more; but still no sales."

"That girl," said Smitt with a sweeping gesture, as if that were enough to account for everything. "You never saw such a stir. These sleepy old Dazzalox are all in a dither. Most of them haven't seen her yet, but they know she must be something terrific to make old Jo-jo-kak miss his funeral.

"Now they can hardly wait for the Challenge Parade that Jo-jo-kak has promised. Did I ever tell you about the Challenge Parades they have here?"

"You told me they put on big shows to impress each other with their wealth."

"That's what it amounts to," said Smitt. "Although to them, it has a lot more meaning, because it has carried down from the centuries when they had wars, and each potentate would parade his army and challenge the world. Now they don't have armies, so they parade their families and slaves and jewels and their famous weapons. Such an orgy of display you never saw!"

"Tell me something," said Allison in a voice of quiet confidence.

Then their conversation was interrupted by the attendant in charge of sales, who dismissed the one-stripers from the salesroom, for the business day was over. Allison jogged back to his temporary quarters at the Red Suburb and Smitt, being off duty, accompanied him.

Allison stripped and got into the natural shower bath that gushed out of the rock wall, for he was hot and dusty.

"Tell me," he resumed, while Smitt prepared some food for him, "is Jo-jo-kak interested in this Earth girl simply as an ornament for his display, or—Hell, man, you know what I mean."

Smitt shrugged his shoulders sympathetically. "I wouldn't want to say."

Allison frowned worriedly. "Of course, she's beautiful," he said. "There's no denying that. And if these Dazzalox have an eye for beauty—"

"The point is," said Smitt, "that no Dazzalox ever saw an Earth girl before. She's a novelty. Any Dazzalox who can have her for his Challenge Parade has gained a big edge on all his fellows. That's what Jo-jo-kak is after. Still—"

"You should have seen the look in his eye when he saw her," said Allison. "I don't trust him. She was clever enough to call for his wife before she would go with him. If it hadn't been for that—"

SMITT shrugged. "They're Dazzalox. We're humans. We slaves have never had any attraction for the Dazzalox women."

"Dazzalox women aren't attractive," said Allison.

"Through our eyes, no, of course not."

"It would be a pretty pickle if the Dazzalox potentates saw through *our* eyes.'" Allison dried himself on a towel of matting and got into his one-stripe uniform.

Smitt munched at a ripe fruit thoughtfully. He began to see what Allison was driving at.

"Say, this thing might turn into some kind of avalanche. Already the potentates have found out from us slaves that there are *more* of these Earth women where this one came from. And when they take a notion they want something—"

Allison caught on instantly. "They know that Kilhide, with all his scientific magic, will get it for them somehow."

"Exactly."

"Kilhide is having the robot ship serviced," said Allison dryly.

"The hell! Damned louse!"

"I thought you approved of Kilhide and all his thievery and 'gentle' murders and—"

"Kilhide's a devil!" Smitt muttered under his breath, glancing about to make sure no other slaves were within hearing. One never knew what fellow slaves might be tale bearers.

"We lick his boots because he's got us. It's futile to fight—so we don't care whether we live or die. But if he starts shipping women here for slaves —"

"There'd be something worth fighting about!" snapped Allison. "Which way to Jo-jo-kak's? I've got to see June O'Neil."

* * *

LESTER ALLISON skipped up the long circling staircase as nimbly as a squirrel. The red flame of his torch fluttered over his bare arm. It was a torch of porous stone. Smitt had shown him how such torches could be made by soaking a strip of gray stone in liquid fuel and touching it to a blaze.

Another round of steps and he found himself on the uppermost level beneath the cavern roof. Before him a semicircle of dim flares outlined the railing that enclosed the open shelf of rock: the combination balcony and front porch of Jo-jo-kak's built-in mansion.

A momentary impression of carved arches and ornamental furniture, then Allison's eyes lighted upon the figure of the girl standing before a natural mirror of polished black rock.

"June," he called softly.

The girl turned and her face brightened.

"Lester!"

She ran to him and he caught her hands. Then, rather in awe, he stepped back to gaze at her.

"You're—you're beautiful!"

Allison couldn't remember ever having said those words to a girl before. Certainly no words could have been any more appropriate, even if he did explode them quite unintentionally. June O'Neil was dressed in all the splendor of an Oriental queen.

"It's part of my costume for the Challenge Parade," she said. "There'll be a headdress too, and some ornamental hangings from each wrist. All the Dazzalox in this neighborhood have been working on it for hours, but just now they are all away, making more plans."

"Then you're—alone?"

THE girl nodded. "It's wonderful of you to come, Lester. I've been so worried about you."

"Nothing to worry about," Allison laughed, involuntarily rubbing the bruises on his face that had come from Kilhide's boot.

At once they fell to talking of all that had happened. The head of the

long circling stairs seemed an ideal place to sit. They were close together, and their very closeness made them realize that they were two adventurers in a land of hidden perils—adventurers who couldn't lose hope as long as they were looking in each other's eyes.

"It's good to be with you," said Allison. All the longing and desire to be alone with this girl that had kept his heart pounding in the interminable hours on the space ship, and the torchlit hours since, flooded over him. His arm held her tightly.

"Are you afraid here?" he asked.

"Not as much as when Kilhide talked to me. I shudder for fear of Jo-jo-kak's finding me alone; but his wife takes care of me, and I feel safe with her. She's much younger—only three hundred Mercury years. I think she must have been badly upset because he didn't go ahead with his farewell, though she pretends everything is just fine."

"Has anyone been to see you, June?"

"Who would there be—but you?"

"I thought perhaps Ted Tyndall—"

"He still despises me for bringing him here. He'll blame me to his dying day."

Allison was silent for awhile. Together they watched the lights of the streets below, the Dazzalox coming and going, the ribbons of water chasing through the ravines.

"Wouldn't it be beautiful up here," said June, "if we could only forget all the fears and troubles that are closing in on us?"

"It's easy to forget everything else when I can look at you," said Allison, conscious that his face was very close to hers.

"This place is like I've always imagined a penthouse would be," she breathed. "Only here the sky is a rock roof right above our heads. Could you pin some little lights up, Lester, for stars?"

Lester Allison wasn't sure why he chose that moment to kiss her. He only knew that his lips came close to hers and at once he was lost to everything except June O'Neil. Then swiftly the dangers surged back into his mind, and their lips parted reluctantly.

"That's just to remind you," he said softly, "that I'm with you in whatever happens."

The girl looked into his eyes intently and nodded without smiling.

"If my plan works," said Allison, "I may get you back to Earth soon. Kilhide is preparing his boat for another trip." June looked at him questioningly. He added, "I'll keep you posted."

"You'd better go now," she breathed. "They'll be coming back soon. The way Jo-jo-kak has been blustering around with his sword, I wouldn't put anything past him. I hope I don't have to be near him in the Challenge Parade." She laughed lightly.

"Is it something you dread? I never know what to expect of these Dazzalox."

"I'll be all right," said the girl bravely. "It's probably foolish for me to worry."

Her mind flashed back to Kilhide—Kilhide, giving her to this erratic old potentate; Kilhide, waiting to see her humiliated as an ornament in a Dazzalox display; Kilhide, who held all the power over every human being in these chasms.

"I'll be with you," Lester Allison repeated as he said good night.

CHAPTER VI

The Living Ornament

THE holiday brought the full five thousand natives to the gayly decorated Grand March stadium. They came early, in a more than ordinary

festive spirit. Challenge Parades of past centuries had often been hundreds of times as long in the preparation, but none had ever evoked so much excitement or suspense as this one.

"Girl! Girl!" was the cry everywhere.

From the hour that the famous Jo-jo-kak had walked out on his funeral, that magic English word had taken the Dazzalox civilization by storm. It was on every Dazzalox's lips this hour. Whatever else old Jo-jo-kak might have in his parade, the important thing was that he would exhibit the most novel—and according to rumor, the most beautiful —living ornament ever seen.

Lester Allison watched from a front seat. He was with Smitt, who had chosen seats within hearing distance of Naf, his owner. While the excited talk and cheering gathered momentum, Smitt quietly described to Allison the highlights of a few previous Challenge Parades that had made indelible impressions.

Allison was most impressed to learn that slaves were sometimes killed at these affairs.

"Not for any reason, you understand," said Smitt, "except that the Dazzalox become intoxicated with the spirit of the spectacular. I've seen them place two slaves on the top of a float and make them maul each other with battle axes, just in order to keep the audience applauding."

A huge door unfolded from one wall and a single magnificent float came into view. It actually floated in; for the Grand March was built over a river, and for this occasion the floor through the center of the stadium had been removed, section by section. The waters rippled brightly with the colored lights of a thousand flares.

"That artificial river bed is as old as their civilization," Smitt remarked. "You wouldn't guess it, but there is a funnel-shaped depression right out there in the center, that is used for some of their ceremonies—the Ancient Rite of the Floating Chop, for example."

"Tell me later," said Allison. He was intent upon the approaching float. It was a huge floating pyramid, bearing many a handsomely arrayed Dazzalox. But where was June O'Neil?

Uniformed slaves towed the pyramid slowly, like a canal boat, from one end of the Grand March to the other. Brilliant lights flooded the tower of steps, which were resplendent with knives, swords, jewels, battle axes—all arranged in patterns that would have made an artist gasp for breath. The action of the figures was dazzling. Gaudy Dazzalox, both male and female, kept up a continuous procession of running up and down the sides of the pyramid.

The only quiet figure was the wizened old Jo-jo-kak himself, who sat on the top of the pyramid. And his time was coming.

But among all the startlingly grotesque creatures, Allison still failed to find a single human being.

The crowds also grew impatient for what they knew must be coming—the mysterious living ornament that had been promised.

"Girl! Girl! Kap-ja-zaz-o-jo-jo-kak-uf-ta-ju-*girl!*"

The cries were an intoxicant to Jo-jo-kak. At last he leaped to his feet at the top of the pyramid and brandished his sword. The other Dazzalox sat down on the lower tiers and turned so they could watch him.

EVEN with five thousand creatures clamoring for the surprise, the old potentate held them off long enough to make a speech. The pyramid floated the length of the Grand March and

back again, with Jo-jo-kak shouting at the top of his withered voice, and with the crowds bawling at him so loudly that no one could hear a word he said.

At last he stepped down on the second step from the top level. With his unsteady sword he struck at the top step. A lid opened.

The five thousand silenced. It was suddenly so quiet that Allison could hear the excited old potentate puffing.

The girl rose up out of the top of the pyramid. She stepped down to the second level. The lid closed. She ascended to the pinnacle, stood there motionless, her arms outspread.

The silence was perfect. Even Jo-jo-kak's breathing must have stopped in that moment.

The ornamental draperies that hung from the girl's wrists trembled slightly, and with every tremble Lester Allison's heart fluttered. To him, her radiant beauty was overpowering. To the Dazzalox— He could only wonder.

Jo-jo-kak swung his glittering sword in a broad gesture of triumph and shouted in a loud croaking voice:

"Girl!"

"Girl! Girl! Girl!" the crowds echoed, and wave after wave of cheering followed while the pyramid passed between the sides of the stadium.

Then someone started a new cry and the crowds picked it up. Old Jo-jo-kak pranced around the fourth level below his living ornament, listening to first this section of the crowd and then that, then tossing his head back and laughing and slapping his sword against his side.

"What are they shouting?" Allison demanded of Smitt.

"They say there are too many ornaments. They want to see the girl."

Just then Jo-jo-kak pranced up three steps and flashed his sword through the air toward the girl's head. Her ornamental headdress shattered and fell. Her black hair cascaded down over her shoulders. The crowd roared.

Jo-jo-kak jogged down to the fourth step and hobbled around the pyramid a few times and then went up again. Another shaky stroke with his sword. The flowing ornaments from the girl's left wrist slipped down onto the steps.

"What are they yelling now?" Allison asked excitedly.

"More!" Smitt answered.

Allison gasped. "He wouldn't dare—"

"He'd dare anything."

June O'Neil's left wrist was bleeding. Jo-jo-kak again did a limping grotesque dance around the fourth level. Then up the steps again. More clumsy, treacherous sword work. The girl winced.

"The damned fool!" Allison muttered loudly. "The filthy old—"

Smitt clamped a hand over his mouth. "Quiet! There's nothing you can do about it."

"Nothing," Allison spluttered. "Oh, if I only had a gun!"

"If *any* of us had a gun!" Smitt mocked bitterly under his breath. *"If!"*

Involuntarily Allison's hand plunged into the pocket of his slave uniform. Only useless things: scraps of gray porous rock from a torch, a pocketbook, and his handkerchief wrapped tightly around something—what was it? Oh, yes, the old bean shooter he had used to win over all the others on the boat.

PERHAPS—but what was that bulge in his pocketbook? Why, it was tiny bottle of deadly poison, poison that had once effected a quick suicide. Poison— Porous stone— A bean shooter—

The girl's bleeding left hand fell to her side. She lifted it up again. Both arms were bare now. She held them out as best she could.

Up the steps came the wrinkled old creature with his ugly crackling laugh. His yellow eyes glittered as he danced around the girl, prodding her body with the point of his sword. Avidly the other Dazzalox cried for more.

Again the sword jabbed perilously at June O'Neil's garments. The blue ornamental band that covered the girl's breasts severed. For a moment her side below her extended right arm was whitely naked; then a long dark line of blood appeared.

Jo-jo-kak hobbled back down to the fourth step and tossed back his ragged coppery head of hair and laughed like a demon. The crowd went wild with cheering.

Then something mysterious happened. Jo-jo-kak staightened up with a jerk. His skinny arms shot out, his gnarled fingers extended. His sword clattered down the steps and swished into the water. The breathless crowd heard the clatter and the splash.

Jo-jo-kak grabbed his mouth. A

Again Jo-jo-kak's sword jabbed at June O'Neil's garments

trickle of blood dripped over his lower lip. He spat and choked and with both hands fought at his mouth, all the while reeling about on the fourth step like a man who has been stabbed.

His wrinkled yellow face grew dark. His arms drooped. His eyes tightened. He fell.

He slid only a few steps, for his crusty yellow hands and feet caught him. He hung on the side of the pyramid, head and face downward, and his ragged coppery hair showered down toward the water. He was dead.

* * *

ALLISON and his fellow one-stripers lay about on the floor of the slave sales cavern. The men complained of the endless hours of waiting.

"Hell, if we've got to be slaves," one of them grumbled, "I wish someone would buy us. I'd rather work for a Dazzalox than have to answer to that swine of a Kilhide all the time."

"Me, too," said another. "But who wants men slaves now? All the potentates are putting in their orders for women slaves. I hear several of the old boys have put off their death dates."

"And some of their women are up in arms about their breaking traditions," said a third. "But if the potentates want Earth women, they'll get them. That's Kilhide for you. Ain't that so, Allison?"

Allison didn't answer.

"He hasn't said a word for hours," someone grunted.

"More like weeks. Brooding about the girl, probably. It's a good thing he got away long enough to fix up her scratches, though. Even if he did get lashed for it."

A silence. A Dazzalox potentate came past, stopped to inquire for Kilhide, and went on. The conversation resumed.

"Funny about that thousand-year-old codger falling dead right when he did. . . . But if he hadn't, he might easily have killed the girl, the way he was going."

"He didn't just fall dead, however," said another man carelessly, "according to something I heard."

LESTER ALLISON looked up sharply. "What did you hear?"

"I heard that he was killed somehow—by some slave—though Tyndall wouldn't tell who it was or how he did it."

"Tyndall?"

"He's the one that saw it happen—at least, he claims he did."

"Where is Tyndall?" Allison snapped savagely.

"The big shot and some potentates took him over for a conference. It won't take them long to find out what he knows."

The group waited for Allison to say something more, but he didn't. His manner was puzzling.

Someone finally asked, "Whatever happened to that rebellion you started when you first got here, Allison? Thought you were going to get us a ride back to the earth."

"Come close and listen to me," Allison said coldly. Then his voice lowered to a whispered undertone. "The robot ship will soon take off. I've found out when it goes and who goes with it. A few trusted slaves. They're being sent to America to gather up a load—all girls. When they take off, Kilhide will be at his lab, working the automatic controls."

One of the men asked, "But how will these slaves get people to come aboard? After all, the people on Earth—particularly in our country—will be mobilized, wary of the return of this kidnaping space ship, and when it does reap-

pear—well—"

Allison's face twisted. "Kilhide has an answer for that, too. No matter how many trips this damned shuttling space vessel makes, it'll be landed each time at night, disguised, camouflaged, on the outskirts of a town or the edge of a woods. I don't even want to think about how Kilhide's slaves will kidnap folks."

There was a swelling chorus of angry mutters.

"Can't we get to Kilhide?" one of the group bit out through clenched teeth.

"Not a chance," said Allison. "He's got more protection than a dictator. *But*—by careful timing, there might be a chance for one or two—possibly three—of us to slip aboard—during the crucial five or ten seconds just before the take-off."

"Let the girl go, for one," said the sideshow barker.

The other men voiced their agreement. She should have first chance.

"I suggest we draw straws for second, third and fourth chances," said Allison, "and we'll follow through as long as our luck lasts."

The straws were prepared. But just as the draw was to begin, the sound of footsteps outside made Allison hold up a warning hand.

"Psst!" he whispered. "Make out we're playing a game."

A moment later Ted Tyndall walked in, and behind him came three Dazzalox carrying ornamented battle axes, followed by Kilhide. It was Kilhide who spoke.

"Allison, the Dazzalox want you for the murder of Jo-jo-kak."

Allison's eyes met Kilhide's and read the evil delight that lurked there in the handsome scientist's saturnine, gloating face. Kilhide, however, could not meet the other's accusing stare. His own eyes lowered, came to rest on the straws the slave men held in their hands.

"What is going on here?" Kilhide demanded, all suspicion. "Not drawing lots for some little trick, are you?"

"You don't think," Allison fairly purred, "that any of us are that clever—do you, Kilhide? If you have made us slaves, at least you cannot deny us the right to play an occasional game."

Kilhide flushed darkly, made as if to say something, and then retired from the room in momentary confusion, gesturing to the three Dazzalox to take Allison along. Allison rose leisurely, glanced back at the men who had been about to draw straws, and surveyed Ted Tyndall with amused, contemptuous eyes. Tyndall's face turned away.

"Let my good friend Tyndall have my straw," Allison said as he left in the center of the three Dazzalox. "Perhaps—perhaps he likes to play games, too. Perhaps there will even come a time when he will be 'it'!"

* * *

AT snail pace the robot ship moved along the cavern runway, its gleaming black metal nose pointed toward the unlighted tunnel that would let it escape, somewhere miles beyond these buried chasms, into the void. The rocket motors thundered.

Several men in slave uniforms waited, concealed in a deep shadowy crevice. The drawing of straws had gone through according to Allison's original plan. Ted Tyndall, in fact, had taken Allison's place with an almost sweating eagerness.

Silently the men counted off the seconds. Another one-striper came running to them a moment later from the other end of the crevice and whispered his news breathlessly.

"Allison couldn't get her to come!" he gasped. "She's determined to stay."

"Hell!" the carnival barker muttered. "We should have guessed that she wouldn't go unless Allison did. Wish

to God I'd given Allison *my* chance. If there was only time—"

"Not a chance," said the news bearer. "They've just convicted him of murder. He's sunk."

The ship was about to stop to take on Kilhide's trusted slave. It was time to act. Since the girl hadn't come, the barker's turn was automatically raised to first. Ted Tyndall's chance moved up from fifth to fourth.

"Why can't I have her place?" Tyndall begged. "After all—"

"You're fourth!" the barker snapped. "Heads up— All ready? Remember what Allison said. We jump out of here at our own risk. Either we make it or we don't. Ready, number two?"

Number two stood directly behind the barker, number three next, Ted Tyndall and the rest followed in line.

The ship eased to a stop. On the opposite side of it Kilhide's minion would enter. There was a click; the airlocks on this side automatically pushed open.

The carnival barker dashed out.

Number two failed to get started, for Ted Tyndall gave him a violent push and crowded out ahead of him.

Then above the sound of the idling rocket motors an automatic gun rattled. The barker and Ted Tyndall fell. The other men fled back through the crevice as hard as they could go. The robot ship roared away exactly on schedule.

CHAPTER VII

War of the Sexes

LESTER ALLISON lay on his stomach a fortnight later, his chin resting in his hands, his eyes watching the Dazzalox traffic come and go.

The heavy metal bars of his prison door afforded a comprehensive view of Dazzalox life, and in the many hours he had been here—an estimated twenty-five days, Earth time—he had gained much insight on the rising conflicts within this subterranean race.

A sharp, bitter conflict between the sexes!

At first, when he had been hailed into the absurd courts of native justice, he had been mildly surprised at the pronounced difference of opinion between the males and the females regarding his degree of guilt. To his astonishment, even old Jo-jo-kak's widow had made a stout appeal in his behalf.

"This slave not kill," the unbereaved spouse had declared in her prided English words. "Jo-jo-kak, his time to die. He try to escape death. He die."

The other women had carried their superstitions even farther. It was the official duty of the Dazzalox women to uphold and defend the great traditions. When they discovered that their males were yielding to a strange urge to break traditions, they were sure that Jo-jo-kak's death should be interpreted as a warning. Nothing less.

To Allison's grim amusement, many of the old men had cancelled their death dates, as if life had suddenly taken on a new interest; and this, the women complained, was upsetting to their careful plans for the distribution of food and properties. But back of it all, Allison knew, was a deep-rooted female distrust of the ill-suppressed desires of their males for "girl"!

If this Allison slave be guilty of a murder, the women whispered among themselves, then he should still be dealt with leniently; for he had put a timely end to the most undignified and ungracious exhibition of any Challenge Parade in their memory.

But although the Dazzalox women considered that the murder had been well timed, if murder it was, the male Dazzalox were exceedingly angered that the act had occurred just when it did.

They had been crying "More!" to old Jo-jo-kak, and he had been complying.

Indeed, the Challenge Parade had been on the point of making memorable history when Jo-jo-kak's death brought the excitement to an end. The murderer deserved death. No, he deserved the worst kind of death!

Between Ted Tyndall's eyewitness account and the telltale bottle of poison which Allison had dropped and broken in his haste, there had been no difficulty proving guilt. The only question which Kilhide had left open to the potentates was: what was the most appropriate sentence?

Allison closed his eyes as these thoughts flooded through his mind for the thousandth time. The perspiration trickled over his half-naked body. He knew that before the manner of his death had been decided upon, other things had happened to make his case a spectacular issue.

The most important thing was that the robot ship had returned on schedule seven days ago after its week's trip to Earth to dump twenty-five nice-looking girls—stolen from a factory in eastern United States—into Kilhide's lap.

"There are now over a hundred male slaves; there are twenty-six female slaves in our society," Naf, Smitt's owner, had reminded his fellow potentates, speaking in their native tongue during the last session of Allison's hearings.

"Unless we deal firmly with the murderer of Jo-jo-kak, we may expect more trouble from the male slaves."

The potentates had applauded vigorously.

"If the females are to be our slaves, we must have complete freedom in our management of them." Naf's words had led to enthusiastic cheering. A severe execution seemed in order.

ANOTHER potentate had hit upon another need for such an execution, saying, in effect,

"If these female slaves are treated to the bravest and most daring of our Dazzalox performances, in which we put to shame the poor fighting skills of their males, they will be convinced that male slaves are insignificant compared to us. The most daring and spectacular way for us to execute this murderer is by the Ancient Rite of the Floating Chop."

So, in spite of demands for leniency from the female upholders of tradition, Allison had been condemned to die by the Floating Chop.

And what had happened to the anger of the women aroused by these masculine strategies? At this very moment Allison could look out into the streets and see groups of female Dazzalox talking in ominously low tones. The conflict was gathering fury. It had been gathering all the past weeks. There were subtle signs here and there that the lid would soon blow off.

Allison felt a poignant wish that he could live to see what form the conflict would take, and whether the women would dare do violence. But he doubted whether he would live to find out; for he was to die by the Floating Chop.

When? he wondered.

Perhaps not until this orgy of buying and selling the new females had subsided. Not until the arrogant old potentates had had their turns at staging ostentatious Challenge Parades to impress these lovely females slaves with their grandeur and power. Not until the speculation on the slave market had passed its first frenzied wave.

Perhaps not until the boiling seas had swept periodically through these streets and river beds, to wash away the filth and grime and half a Mercury year's accumulation of bodies from the death

tunnels. The blue dust from the stone streets was constantly in the air, so thick and fast came the traffic of hard, crusty yellow feet, and so long had it been since the sea had swept through.

"How's the boy, Les?"

Lester Allison looked up into the grinning face of Smitt. A flicker of disappointment came into his own visage.

"You couldn't get her?"

"Not yet, Romeo. But I'll try again soon. It's devilishly risky, you know. As long as she's with Jo-jo-kak's wife, she's safe. But with these potentates practically fighting over girl slaves—"

"I know," Allison grunted. "I see plenty of it from this angle, with the slave mart right across the street from me. Those poor girls are scared to death. They fell into a pretty mess of hell when they came here. Did June send any message?"

"Her love, and this." Smitt passed a package of food through the bars. Allison took the package with eager begrimed fingers. Smitt grinned broadly and knowingly.

He mumbled, "I've begun to figure out your side of things finally. That is—" He shuffled his feet like a bashful boy with something embarrassing that had to be said.

"What are you driving at?"

"Well, at first I thought you were a fool to try to fight Kilhide's racket. It was too much like batting your brains against a stone wall. But since that load of females arrived, I've sort of picked up the feeling that life is worth fighting for."

"You mean—"

"Her name's Mary," said Smitt, as if that explained everything. He added, chuckling, "I know of three other fellows who have got it as bad as I have. They've been plumb dead to themselves for years down here, but the minute some girls came along and began to look at them as heroes, darned if the fellows aren't pawing the earth for a chance to put the hammerlock on Kilhide and take a shot for the void!

"If you were just on the other side of these bars, Les, that rebellion you've been propagating— Listen! What's that?"

"Another load of girls," Allison muttered. "Two trips in two weeks!"

THE subterranean canyon filled with the percussion of the robot ship. Before the sounds stopped and the echoes died, hundreds of Dazzalox bounded down their steps and through the streets toward the Red Suburb.

Soon another twenty-five attractive working girls were lined up in the slave market across the dusty plaza from Allison's prison, and at once the bewildered creatures were surrounded by a chaos of buying and selling and trading—a chaos of shrill birdlike voices screaming and quarreling in an inhuman tongue. Potentates hurried to the market with many of the first crop of girls—and with groups of two-stripers to make exchanges.

Smitt was still sitting outside Allison's bars when Kilhide breezed past, then turned back to say,

"I'm looking for June O'Neil. Have you seen her?"

Allison's fighting temperature jumped. His words clogged. Smitt answered with a blank stare. So far as Smitt knew, she was with Jo-jo-kak's widow.

"Find her for me, Smitt!" Kilhide snapped. "With prices skyrocketing, she ought to be back in circulation."

Smitt saluted and he and Kilhide went their separate ways. Allison glanced dully at the package of food.

Half an hour later Smitt returned to the barred opening, and worry showed on his face.

"She's gone, Les. What do you suppose—"

"What did Jo-jo-kak's widow say?"

"*She's* gone, too."

"Where?"

"I couldn't find out."

"Didn't any of the Dazzalox women see her go?"

"Les, you'll think I'm blind and deaf and cockeyed. But by George, I couldn't find *any* Dazzalox women—*not a one!*"

Allison's eyes shot across to the crowd of Dazzalox men. Apparently most of the male population had turned out to swarm about the slave mart. He glanced up and down the main thoroughfares, toward the rock-walled vestibules and shadowy side streets where a few hours earlier groups of women had been conferring in hushed tones.

"Something's cracked, Smitt," Allison said with a snap of his fingers. "I'll swear I haven't seen a female Dazzalox since these new girls came in."

The package of food caught Allison's eye. He shuffled its contents and there he found the answer—a penciled note from June.

Dear Lester,

This is to tell you that the Dazzalox women are going to migrate. Jo-jo-kak's widow has confided this to me. You can guess how desperate they are about their broken traditions when I tell you that they debated whether they should run away or commit wholesale murder upon all the males. They seem to feel that the sooner their race comes to an end, the better. It is the only answer, they say, to their outraged traditions.

"They're the damnedest lot!" Smitt hissed. "I never could understand them and their traditions."

ALLISON read on.

They talked of escaping these caverns through some ascending passages. I do not know whether they can.

"They run the risk of death from the sea," Smitt muttered. "And if they find their way to the top, they'll be scorched to cinders, from what Kilhide says."

Allison read feverishly now. *For appearances' sake I must go with Jo-jo-kak's widow. But I can't give up believing that you may yet escape, Lester. You must. I shall try to break away from the women before they leave the caverns, and wait for you. But if you do not come—I will tell myself to the last that somehow you must have escaped them and flown back to the earth. I shall always love you. June.*

Lester Allison leaped to his feet and shook the bars like a wild man.

"Get me out of here, Smitt! I've got to get out!"

Smitt's hand shot through the bars and flattened over Allison's mouth.

"Quiet! You'll have Kilhide on your neck!"

"But *June*—"

"I'll go after her," Smitt said, and for once he wasn't grinning. "If Naf comes looking for me, tell him—nothing."

ALLISON stalked the prison cave hungrily. All the food June had sent him that day had been devoured, and the closely eaten rinds of the fruits had washed away with the gushing rivulet that pounded incessantly down a jagged wall of his cave and chased through a barred opening to deeper ravines beyond.

He was scarcely conscious of his hunger. He was keenly conscious, however, that it had been hours and hours since

Smitt set out to bring June back. And during those hours—what a terrific hullabaloo! The Dazzalox men had discovered what had happened, and they had forthwith exploded into an enraged brand of pursuers.

A thousand or so pairs of hard yellow feet had thudded through the dusty caverns, leaving only the echoes of angry shouting and clouds of purple dust in their wake. What had followed when they finally overtook their rebellious runaways several miles up the canyons, Allison could only imagine.

But evidently the males had administered some sort of persuasive argument, either by force or threats, for the women had at last begun to dribble back.

"That ends that," thought Allison, as he watched group after group straggle homeward. "Or is it only the beginning?"

The more closely he observed, the more he wondered. The thing he particularly noticed was that the groups of females who trudged past within his hearing were not speaking to the males who followed them. The husbands might growl and shout threats and dictate demands, but the women only huddled closer together and said nothing. Were they refusing to squander their energies on a *verbal* quarrel, Allison wondered.

"Violence ahead!" he muttered to himself.

Whenever the women passed near the large violet flare, he could catch a certain glint of desperation in their yellow eyes. And suddenly he discerned in that blazing desperation a glint of hope for himself!

If—if—if—if—

IF only these mad Dazzalox women would unleash their fury *soon enough,* he might escape the Floating Chop!

And if Smitt was right about some of the slaves; *if* they were ripe to risk Kilhide's guns; and if they could storm the upper secret chambers of Kilhide's lab, where the controls to the robot ship were thought to be hidden—

If— But these were runaway dreams, with less chance to succeed than the runaway Dazzalox women. Allison's dizzy thoughts boiled down to one single, immediate, vital *if*. If Smitt didn't come back soon with the news that June O'Neil was safe, Allison would go crazy.

* * *

JUNE came to him hours later, tired and dirty but still beautiful. Allison kissed her passionately through the bars of his prison, and she smiled while he brushed the rock dust from her cheek and her shoulder.

"Thanks—thanks more than I can tell," said Allison to Smitt, who stood by, grinning. Then Smitt was off on business of his own, and Allison and the girl were sitting side by side with only the black vertical bars between them.

Food and drink passed through the bars. June made believe they were dining in luxury; and as her dark eyes flashed smiles at him and her hair fell against his shoulder, the luxury became genuine for Allison.

"You must go get some rest," she said, after he had listened to her story of the women's ill-fated venture. "I'll be safe for a time, surely. The Dazzalox will probably turn in for one of their three-day sleeps after all this turmoil."

The girl's smile quickly vanished. "No, there are other plans." She spoke with tense restraint. "Desperate plans. I—I can't—I mustn't talk of them."

She was pale, and Allison felt the blood leave his own face.

"Tell me."

June shook her head. "All the way

back I heard them talking. The men boasted, and the women whispered." She hesitated. "I didn't hear all the details. I didn't want to. I couldn't." She choked. "Then men were talking about—"

"A circus in the big arena?"

The girl nodded. Allison felt the cold surge through his spine. So at last the Floating Chop was at hand!

"They've got to have an orgy of cruelty at once," said June. "It's their savage way of forgetting the slap the women have just given them. As soon as they had turned the migration back, they began to clamor for a celebration —and the first thing they thought of was Jo-jo-kak—and you."

"And the Dazzalox women?" Allison asked. "What do they have up their sleeves?"

"Wholesale murder," June answered.

"How soon?" Those eager *ifs* were jumping through Allison's mind again. *"How soon?"*

June gave him a quick frightened look. "Almost too soon," she said. "Perhaps as soon as they can pick up enough knives—as soon as the signal comes. Then they'll all strike at once."

"Don't tremble so," said Allison softly. "There's still a chance for us. I've got a scheme—"

A shrill brassy gong sounded from somewhere down the torch-lit street. It clanged out three inharmonious notes in rapid succession. Then it came again, and again. Ominous triple clangs.

AT once Dazzalox men and women hurried down the distant stairways. Dazzalox potentates led their elaborately adorned female slaves down the streets. Two-stripers and Mercurian natives paraded together in hastily arranged formations—t o w a r d the Grand March.

Friendly slaves slipped past Allison's prison to give him a sign of farewell or a word of tasteless hope. Hope that snatched at straws.

"Your strategy?" June asked for the third time. She too, was snatching for straws in these last minutes. She knew that no condemned creature had ever lived through the Floating Chop.

A slender Dazzalox in a gaudy green athletic suit bounded past, swinging a gleaming black ax. A crowd chased after him, cheering him. Some of them stopped to hoot at Allison for a moment. They raced on toward the stadium.

"Your strategy?" June repeated in a tight voice. Her lips trembled.

"I'm going to fight for time," Allison answered. "If the women are on the verge of a slaughter that nothing can stop—well, I may as well take advantage of it. Probably they plan to spring their knives as soon as the men are intent upon my execution ceremony."

"Yes." June was staring off into the gloomy distance.

"Then if I can only stave off death until the women strike," there was a maniacal hope in Allison's eyes, "then *my* party will be forgotten—at least, there's a speck of a chance. If I can work that break, I'll bolt for the narrow stairway at the lower end of the stadium. You know—to the left of the striped door."

"Stairway," the girl echoed dazedly.

"So that's my strategy—to hold on to dear life till the women give their signal and hell breaks loose."

A group of armed Dazzalox officers rounded a corner and came toward the prison.

"If I only knew what signal the women will wait for," came Allison's final whisper. And then he kissed the girl. The officers opened the barred door and led him away.

"*'Signal'!*" June moaned and she sank to the floor in a paroxysm of sobbing. She had not had the heart to tell him that the signal the Dazzalox women had agreed upon was the death blow at the Ancient Rite of the Floating Chop.

CHAPTER VIII

The Floating Chop

THE chains on Lester Allison's wrists led him back and forth before the stadium crowd. He was royally hooted. All the Dazzalox words for "killer" and "criminal" and "monster" were hurled at him. He had learned the Dazzalox tongue only to be mocked by it.

The four uniformed Dazzalox who marched him around kept the two long chains stretched tight so that they themselves were never close to him. They were not only playing safe, keeping out of his reach; they were shunning him.

"Let them delay all they want with their damned preliminaries," Allison thought to himself. He clung to his one false hope tenaciously.

Such a sinking feeling assailed him as he had never known before. As if death were already leading him by the hand. As if he had already departed from everyone in the world.

Even the one-stripers and two-stripers he glimpsed here and there among the assemblage of glittering Dazzalox were completely apart from him now. Their bondage was nothing compared to his. But their fates would come in time—and what would they be? Allison wondered. The chain whipped and jerked at his left wrist, a signal to turn back.

His blood chilled each time they led him past the pool in the center of the arena. A circular section of the flooring had been removed from over the hidden river. That circular pool was to be the scene of his execution.

Allison's eyes followed the three floating discs, each ten or twelve feet across and apparently made of tightly compressed faggots from some subterranean timber or root, that circulated within the pool. They were like three huge doughnuts in a kettle of grease, except that the grease was green water and the doughnuts were like round meat-cutters' tables, h a c k e d and scarred from ceremonies immemorial. The chains led Allison on.

Glancing upward, he saw that there were a number of female slaves here and there in the crowd. Some of them were in gold and blue slave costumes, others still wore their American clothes; but all were richly adorned with bold Dazzalox jewelry and medals and trinkets. They sat near wealthy potentates. Probably they were too baffled, Allison thought, to know what was going on.

And yet it was their innocent presence that was figuratively to bring the universe crashing down upon the Dazzalox race. At this very moment, how silently the Dazzalox women sat at the sides of their unsuspecting males, like charges of electric death awaiting the flip of a switch.

Back toward the pool the chains pulled Allison.

Now his eyes widened in horror as he counted off three Dazzalox, lithe and well muscled. Each of them wielded a black metal double-edged ax, and all three were now enthusiastically engaged in warming up.

They pranced around the open arena in their athletic uniforms, glittering with polished medallions. Attendants tossed fruits in the air for them, which they deftly sliced with their flying axes. Up in one piece, down in eight—and the crowds hailed the feat with lusty cheers.

At last Allison was released into the circular pen—a fence of vertical iron bars that enclosed the pool. His wrists were free again, his mantle was removed. He wore only his slave trunks. Bars clanged after him.

So this was the arena for his execution! Without hesitation, Allison plunged into the pool.

A dozen easy strokes took him across and he climbed up on the narrow walk that bordered the pool. The walk, like the ten-inch discs in the water, was chipped and hacked. Allison sat with his back against the bars of the fence and let his feet rest in the cool water. His arms involuntarily jerked and trembled.

"Stall for time," he kept saying to himself in a voiceless whisper. "Just keep stalling for time."

ONE of the floating discs brushed past his feet. He kicked at it, then leaped onto it. It was as buoyant as cork. He crossed to the other two discs—the flow of the river through the pool kept them in constant circulation—and jumped back to the narrow walk.

Now, amid a loud ovation, the three muscular choppers entered the pen and the gate was fastened behind them. They stood together ceremoniously, with their long-handled axes uplifted, while an official on the outside made a presentation speech.

The crowd listened breathlessly. Between the announcer's sentences Allison could hear the bubbling of the river as it seeped along under the stadium floor, into the eddying pool, and out again through its underfloor passage. Perhaps—

No, the very words of the announcer extinguished a sporadic hope that flashed through Allison's mind—the hope of an underfloor escape. In substance the announcer said:

". . . and he has been condemned to die by the Floating Chop. There is no escape from the Floating Chop. The surrounding fence is made of strong bars with spears at the top. Beneath the water there are walls of metal bars and of stone which narrow to a point. The culprit must either meet his death by the ax—or drown.

"The choppers have a sporting chance to kill him. If they succeed before drowning overtakes him, they shall win the Ancient Award of the Floating Chop. If they fail, all three will lose their titles of Floating Choppers. A salute to their success!"

The choppers, standing in a line across the pool from Allison, swung their axes in circles and called out some unintelligible response in unison. They came to attention again while the announcer finished.

"Remember that the rules cannot be violated," he said, in effect. "The culprit's members must be severed in a precise order: first, the two feet, then the two hands, finally the head. You are now ready. Begin!"

The subterranean canyons rocked with yelping cheers of the male Dazzalox.

Eagerly the three choppers tightened their grips on their axes. The one dressed in green started around the circular walk in one direction, the orange axman took the other. The yellow one stood where he was. Allison dived for the center of the pool.

He came up to see a yellow-clad form floating toward him on a disc. He caught his breath and looked for an open corner. There wasn't any such thing. Not as long as the two choppers were running around on the narrow circular walk.

Allison swam for a disc, climbed up onto it. The advantage of Mercury's slightly lighter gravity kept surprising

him as he accustomed himself to the water. But other less pleasant surprises soon flooded in upon him too swiftly for him to collect his thoughts —surprises in the form of leaping choppers and spinning axes.

He sprang backward from the disc barely in time to escape the black streak that whizzed past his feet. He plunged for the center of the pool and stayed there, treading water, studying the vicious yellow eyes, trying to gauge where the next attack would come from.

The yellow chopper floated near him on a disc. The axman's double eyebrows were squinted menacingly toward the water, his wicked blade was poised. He was trying to sight Allison's submerged feet. He floated past without doing any damage, and the crowd clamored for action.

THE green chopper was dancing about on the next disc, swinging the flat of his ax against the waves to slap water into Allison's face in order both to enrage and confuse him.

Suddenly the orange man plunged from the side, ax and all. He swam underwater, but the waves showed where he was coming. Allison surface-dived and cut well under him.

Another dive sounded, and Allison looked up from a depth of several feet to see a chopper coming straight down toward him. With a swift twist Allison plunged deeper. He realized by now that the advantage of vision was with whoever was underneath, for all the light came from above the pool.

But suddenly it dawned on him, as he scraped against a narrowing wall, that the cone itself was a treacherous trap. The deeper he went, the easier it would be for three axmen to close in on him. He switched back, barely passing a third diver as he shot upward. A hard hand clutched at his ankle. He kicked out of it and bobbed up to the surface like a jumping fish. An instant later he was up on the ragged walk, panting furiously.

Three ugly Dazzalox heads came up. Three axes caught on the edge of the walk and the choppers pulled themselves up with practiced skill.

There was a moment's hesitation while the green axman gibbered a word of instruction. Then two of them came racing around the perimeter, one from each direction. The third leaped out to a floating disc and waited.

Allison dived again. There was nothing else to do.

He made as if to dive deeply; then with distended eyes searching the green waves for forms above him, he switched back to retrace his course. It was an old trick he had used when he was a boy playing tag at the lake. Five seconds after the three choppers dived for him, he was upon the surface again.

But he was well aware that all the tricks he could muster would not last long against their teamwork. . . .

To the utter amazement of the roaring, bellowing crowds, Allison's wily tactics lasted for most of half an hour. By that time he was nearly exhausted, both physically and mentally. Had it not been for the rules, his hands and head would never have survived the ceaseless attacks. As it was, nine times the ax blades had bit into his legs.

Three of the cuts stung him constantly. The sharp pains soaked upward through his legs, and blood and strength seeped away from him. But there was nothing to be done about that. The crowd yelped for action and the three choppers closed in on him again.

Allison dived deeply. For the first time he allowed himself to go down—down—down.

The walls of the cone narrowed around him. If the choppers should fol-

low— But an upward glance told him they were still floundering several feet above, trying to locate him. If the fates would only give him the one break he craved!

He groped at the bottom of the cone. His search was futile. He had hoped his hands might fall upon an ax lost in some previous tournament, fallen to the bottom of the cone, forgotten. Again he explored.

No such luck. All his groping hands found in the point of the cone was slime. Slime and bits of bone.

Slime! He cupped his two hands into it, then up he floated—up to the surface with bursting lungs.

HE caught sight of the three axmen back in their positions. He heard the crowd wail for action. Action! In another moment they would get it, if the gods of luck would give him half a break. Treading water at the edge of the pool, *he smeared his slimy hands over the walk.*

The orange chopper bounded toward him with devilish yellow eyes gleaming. Three swift bounds—and a grand slip! Flying arms and legs, orange body, black ax—all went careening into the fence. The chopper made a swift scramble to recover his ax. Allison was too quick for him.

A tense gasp echoed through the stadium, a long gasp that melted into worried mumbles.

The yellow and green choppers who had started around the ring to their fellow's rescue stopped short, for the orange form plunged into the pool. In his place stood the slave they were to execute—a well-muscled human being *with an ax in his hands.*

They jabbered savagely for a moment. Outside the cage the announcer roared something at the frenzied crowd.

Allison understood. The rules were automatically off. The choppers were to strike anywhere—and strike to kill! No more playing around. This culprit was a dangerous creature!

Another ax was passed through the bars to the orange executioner. Three attendants outside the pen came toward Allison and debated trying to reach in and take the ax away from him, but decided against it when he flashed the weapon deftly toward the bars.

"Stall for time," Allison thought, but the words had a sickly taste in his mouth. How *much* time—or had the women forgotten their resolve? Pains shot through his feet. He felt weak from loss of blood. He wanted to lie down and faint away.

Now two of the axmen began to close in on him from each direction, as before, but more cautiously, desperately. A disc floated toward Allison's edge. The yellow chopper was on it. There was no more stalling. It was kill or be killed. One false move would be the end.

Which way to strike? His right-handedness determined. He would throw his stroke in the direction that would give his right arm full play. Automatically he plunged to his left to meet the approaching green chopper.

But fate waited in his path—the slime.

Three steps he bolted, then his footing gave way. He shot outward over the water. But as his foot gave a final kick against the edge of the walk, he flung his ax back with all his strength, squarely at the green body. The force of a madman went into that blow and followed through as the ax shot out of his hands.

His plunge carried him deep into the cooling waters. His hands were free now. He plodded on downward. He didn't want to come up again. His strength was gone. He felt that drown-

ing would be so easy, so simple. He clung to the slanting wall and waited.

No one came after him. Things began to go black. His hands loosened. . . .

Even before Allison's face cut through the surface of the water to gasp air, he was conscious of the terrific screaming that filled the stadium. His lungs inhaled air, blearly sight returned to his eyes, blood-chilling cries of terror crowded upon his ears. What a weird terrifying pandemonium!

The tiers of the stadium were a shambles of mass murder. Knives flashed again and again upon the writhing bodies of male Dazzalox. Blood gushed and streamed down the steps. Males and females grappled in death struggles and tumbled down, tier after tier, to roll onto the open pavement of the Grand March.

So the hour had struck at last—the fatal hour that might spell the doom of a race in the ghastly clash of sex against sex!

CHAPTER IX

Destiny

WHAT signal had set the shambles off? Allison's eyes swept the bloody scene and returned at last to the pen of his own intended execution.

Across the pool from him the gate was open. The orange and yellow Dazzalox choppers were outside, now running as if to the rescue of a friend, now halting as if overwhelmed by the scene of terror. They glanced back, and Allison's eyes followed their glance. Their green-suited teammate lay motionless on the walk beside the pool.

The ax, which had sunk deep in his heart, still hung there with its handle pointing almost straight up. Blood flowed in a crooked stream along the water-tracked walk to an ancient ax mark at the pool's edge, and from there the eddying waters carried it away.

Allison dragged himself up out of the water, rolled against the fence and lay there, bleeding, quivering, wondering at the fact that he was still alive. The two departing choppers looked back at him, but their hearts had evidently gone out of their jobs. It was a corps of angry women advancing upon them that absorbed their attention now. The last Allison ever saw of them, they were backing away and defending themselves wildly with their axes.

Two slaughtered potentates rolled down the stone tiers and thumped into the bars of the cage. One of them was Naf, Smitt's master. His wrinkled old face was a contorted mass of yellow chalk. He had weathered a thousand Earth years only to die from a black knife in his side.

The dead and dying bodies rolled down, and those Dazzalox still alive scrambled across the tiers—to kill or to be killed.

Allison was relieved to see that his fellow humans of both sexes were clambering to the upper reaches of the sloping sides and finding exits. His eyes sought for June. He remembered telling her he would try to escape by the narrow stairs above the striped door at the farther end—

And someone was there! Someone waving at him—a girlish figure with black hair and a blue and gold costume.

"June!" he breathed, half aloud. "June! June!" The very name gave him strength. Allison tottered dizzily to the door of the cage, waving at her.

He paused. Several hundred Dazzalox males and females were battling to death on the open pavement before him. Armed women were charging about in small groups. Getting through that mad milieu wouldn't be easy. He looked

about for a weapon. The only thing he saw was the ax buried in the green chopper's riven chest. He turned from the sight and plodded through the battleground unarmed.

"Lester! You were wonderful!" The girl bathed his face with her kisses and tears. "Don't mind me. I'm so happy, I just have to cry."

But the next moment June dried her tears and became practical. She hastily tore strips from her garments to bandage his bleeding feet and legs. A crevice protected them from the spectacle of the bloody war, and they tried not to hear the thudding of feet and the wailing and cursing of males.

"The women must have got off to a good start," Allison remarked, lying back on the rock floor and closing his eyes.

"You should have seen the first attack. It went off like clockwork."

ALLISON asked innocently, "What started them off?"

"The signal you gave them."

"The signal I gave them!"

"They had agreed that the death blow would be the signal to attack. You finally furnished it when you threw your ax at the chopper. They couldn't have waited much longer, anyway. In fact, you provided them with the ideal moment. It was such a stunner to the males, to see you cut down one of their heroes, it was almost equal to an anesthetic."

"I'll bet," Allison said grimly. "But what next, after they finish with their men? Do they start in on us humans?"

"There's only one human they've sworn to get."

"Not Kilhide?" Allison came bolt upright.

"Yes. They blame him for encouraging the men in this mania for female slaves."

"We can't let them get Kilhide!" Allison snapped. As the final bandage was tied he came to his feet. "Kilhide's the only one that can get us back to Earth!"

Hand in hand they ran down the clay ramp as fast as Allison's painful legs could travel. They dodged groups of fighters in the streets, they closed their ears to death screams from bodies that had been hurled into ravines.

They glimpsed the fall of an aged potentate from the top of a stairs; heard a moment later the scream from the terrorized American girl who had just fought free of his grasp; saw the stricken Dazzalox crash to death over a torch light. Wincing, they turned their eyes away as the flames puffed up from his yellow hair and eyebrows. They hurried on.

"Where's Kilhide?" they shouted together at a two-striper who came running from the other direction.

"Layin' for trouble makers. Watch out! He got a couple at the suburb," the slave retorted without stopping.

They slackened their pace as they neared the red metal bridge. A severe voice barked at them from the shadows.

"This way, you two."

They turned to see the gleaming pistol move out into the light. Back of it the sleek white-clad form of Kilhide appeared.

"So you jumped your fate, Allison," said the evilly handsome scientist with a twitching smile. "You'll not jump this one. You happen to be superfluous to my purposes, and this hour was made to order for ridding myself of superfluous people. Your friend Smitt will also qualify. Now, Allison, step away from that girl!"

"No!" cried June O'Neil. "Please—you can't! Not unless you kill us both!"

"Don't be throwing yourself at the

feet of a corpse, Miss O'Neil. It annoys me." Kilhide twisted his little trick mustache into a cynical scowl. "Besides, it's bad taste for one of your rank. You're soon to be queen of these caverns—when the Dazzalox have had their fun, and I—"

Lester Allison and June O'Neil were no longer listening. Their eyes were intent upon the six figures who were cautiously stealing toward the scientist from behind his back. Now Kilhide's words broke off as he saw shadows creep along the perpendicular wall.

THE man with the gun whirled. He faced a group of Dazzalox women with knives and axes in their blood-stained yellow hands. The group bore down upon him. His pistol blazed, and three of them fell. The others swamped him with their blades. His arms clamped over his chest and his gun fell. In another instant he would have died with a knife in his throat, had Allison not interfered.

But between the efforts of Allison and June, not to mention Jo-jo-kak's widow, who chanced to be one of the attackers, the assault was brought to a sudden halt. . ."Ja-ik-lif! Ka-lib-or-taf-ki-damik!" Jo-jo-kak's widow cried, pulling the other women back from the fallen slave master. "It is enough! We leave him to die!"

* * *

THE spacious corridors of Kilhide's laboratory were seething with American men and women, who talked in low excited undertones. Though most of them wore the uniforms of Dazzalox slaves, their faces glowed with hope and enthusiasm. They were on the verge of freedom. They talked of a swift return to the earth.

Whenever their conversation slackened, Allison, sitting near the door, could hear the roar of the rivers outside. The periodic floods of Mercury were scouring the rock dust and filth from the streets. Powerful torrents were sweeping the dead and dying bodies away through unknown subterranean channels, bearing them to the boiling seas on other sides of the planet.

Allison watched through the glass doorway. The winds, generated by the floods, kept the red torches flickering and the shadows of the Red Suburb quivered. Occasionally—but rarely—a rush of water would slap over a flame and extinguish it.

"June asked me to tell you that Kilhide is beginning to stir," said a voice at Allison's shoulder.

"Tell her I'll come soon," Allison answered.

"Smitt and the others haven't returned?"

"Not yet."

Allison's eyes turned again to the red scene, coming to rest, as always, upon the crumpled striped door beside the gaping death cave. Earlier he had seen the three Dazzalox women crash that door with axes, and then themselves fall victims to the escaping death gas. Now the last of those three women was caught by a wave and borne away, and only the battered fallen door was left as a monument to their mad determination.

Poor insane Dazzalox women, Allison thought. Not satisfied until they had turned the last stone upon their own extinction. They had released the invisible death that would rise to slay every male who escaped the high rocks.

Four hooded figures came bounding along the path.

"The door!" Allison called. "Unseal it!"

Someone obeyed, and Smitt and his three companions entered; the door was sealed again. The four men removed their oxygen masks.

"Well?" Allison asked, facing Smitt.

Smitt shook his head slowly. "Complete slaughter," he said. "Every striped door is down. I don't think there's a living soul left out there, human or Dazzalox. We found a few of both up on the shelves, but they were gone." He added, turning away, "We didn't find—Mary."

ALLISON put a hand on his shoulder. "Your Mary is here," he said. "She came in just after you left—and none too soon. I think she'll be all right."

* * *

IN an inner chamber Allison glared into the eyes of Kilhide. The dying scientist had been given every medical attention. He knew he could not live many hours longer, but he fought death as bitterly as he had fought his fellow men.

"You've got to live!" Allison said to him fiercely. "You've got to live long enough to send these people back to Earth!"

Kilhide muttered profanity. "So that's why you wouldn't let them kill me."

"There couldn't be any other reason," snapped Allison. "You've got to come through!"

"You can't threaten me, Allison," the sick man answered sardonically.

"For God's sake, man, show us how to operate the robot ship before it's too late."

The dying man answered with a sarcastic, taunting laugh.

"You've got to do it, Kilhide! You've got to send us back!"

"You can go to hell and fry," Kilhide sneered, and then he closed his eyes.

June and Allison and the others who were at his side during the next two hours were convinced that he never once returned to normal consciousness. All his feverish raving was simply the welling up of repressions and hatreds and loves, dreams and ambitions and scientific secrets that were imprisoned within his warped, complex mind.*

Two hours they heard of the most eloquent raving that ever passed a scientist's lips. A dying genius, declaring himself to be the master mind of the world!

Allison listened in awe; Smitt snatched at every word of information; June, with her practical turn of mind, seized pencil and paper and captured the flow of words in shorthand.

For the fever-stricken slave master was at last the glorified figure he had always dreamed of being. He was host to the world's leading scientists. They were evidently circled around him, and his maniacal eyes glittered upon them as he talked. His delusion was complete.

He commanded them to carry him through his laboratories from top to bottom while he lectured upon their wonders. All through his ravings, he acted as though his delusions were being carried out to the letter. He extracted promises that they would never reveal his magnificent secrets to the rabble from the earth, nor to the world tourists who might come to this place.

He began with the robot ship's controls, followed through the power plant, started through the shops—and then, in

* The human mind is a peculiar organ. In certain types of insanity, which cause a series of repressions, the accumulated emotions sometimes well out unchecked at periods of great physical stress, such as approaching death, severe injury, or great emotional disturbance. During insanity, a censor wall is erected, which very carefully conceals and holds back the desires that really are strongest. When this censor wall breaks, the subconscious gains full control and all repressions are brought out into the light of day. No one who has witnessed such an occurrence can ever forget the extreme violence of this release of pent-up, terror-ridden inner desires and secret ambitions.—Ed.

a burst of rage over imagined enemies from the earth, he collapsed. A minute later, the amazingly brilliant, incredible evil Kilhide passed on to the eternity for which his whole life had been a fitting preparation.

WITH the aid of gas masks, Allison, Smitt and three other men had rebuilt the doors across the death caves. They had needed something to do, they said, while they counted off the days of waiting for the robot ship's final return trip for its last load. Only ten persons remained to go. Today was the day.

June and Allison strolled along the clean streets, surveying the strangely quiet world. All signs of the war were gone. The air was fresh. The waterfalls and rivulets gushed with lively music that seemed more melodious, now that there were no harsh Dazzalox voices.

Strangely, in the many days that had passed since the fighting and the invisible death took their toll, not a single living Dazzalox had been found. In a sense, Allison thought, the women had won a complete victory.

But tears often came to June's eyes as she thought of Jo-jo-kak's widow and the curious friendship that had grown up between them.

"I'm sorry we couldn't have saved her life," said Allison.

"But she wouldn't have been happy living on, after her civilization was gone," June replied. "It is just as well."

Allison smiled at her curiously. Somehow she had reconciled her feelings to the insane violence the women had committed.

"But I understand how they felt," said June, reading his thoughts. "It wouldn't be much fun to live after you've lost all faith in your own civilization."

There was something deep and serious in her dark eyes that Allison appreciated.

"You have some pretty big thoughts for such a young girl," he said. "Were you thinking things like this when you ran away from home? Perhaps you had lost faith in your own civilization, too."

"And if I had," she answered, "what would you suggest?"

"Come," said Allison, taking her hand. "I'll answer that one when we reach the top of this stairs."

They climbed the winding steps to the balcony where, not so many weeks ago, they had first kissed. They looked across to other torch-lighted mansions of the silent, uninhabited city. They saw Smitt and Mary strolling along the street below them.

Elsewhere, they knew, three other couples who had lingered to take the last boat back to earth were also enjoying the quiet romantic atmosphere of this lost world.

"You were going to suggest—" said June.

"That if we don't feel the call of our old civilization too strongly," said Allison, "we might all stay here and build a new civilization of our own."

"Make our homes here?" June crept closer into Allison's arms and there was a bewitching eagerness in her dark eyes —an eagerness for new adventures concerned with life, not death.

Allison kissed her. For a time no word was spoken.

"We five men have been studying the machines," Allison said presently. "Kilhide has left us the foundation for marvelous developments. In time we'll come to appreciate him more—after we've forgotten what kind of person he was."

The girl in Allison's arms shuddered slightly.

"But Kilhide's science isn't civilization," Allison went on. "At least, it isn't

everything. There have to be people that want to live together—honest, genuine people—like you—and Smitt—and Mary—"

"I CAN name the other seven by heart," said June, smiling up at him as if to help him with his pretty speech.

"I saw to it that only these five couples would be left for the last load," Allison said. "Right now the other four men are asking their sweethearts, just as I'm asking you, whether they would be willing to marry and stay right here."

"The other four girls will say 'yes,'" June answered with a faint twinkle in her eyes. "I know, because they've talked and dreamed and planned every hour while their men were out rebuilding the doors."

"Then," said Allison softly, drawing the girl tighter in his arms, "why not make it unanimous?"

(Concluded from page 5)

he could run back through the heavens for about 5000 years! They agreed and started. They didn't realize it was going to amount to a twenty hour job!

But at the end of that time they found what they were looking for, everything in their mechanical sky just as it had been in the heavens the morning of that day that began the calendar!

They read the dials. The date was June 18, 3251 B. C.

What's that we've been saying about time-machines?

FOR a long time now men have been trying, with little success, to harness the sun There's the equivalent energy of four hundred *sextillion* tons of coal in sunlight! And at last the problem of tapping it has been put on a sound scientific basis that holds good promise of a solution.

The Massachusetts Institute of Technology has been given generous funds for a full research job Already great strides forward have been made. Ways of using the heat of sunlight are three. One is to store the heat for later use *as such*. Another is to convert it into power to run motors. The third way is to use the power to generate electricity, and *then* run the world's machinery.

M. I. T.'s answer to the first is improved insulation. Heat collectors—mirrors that warm water—on the roof, and basement tanks so well insulated with new mineral wool that the warm water can be stored in them for six months!

The second and third ways both require turning water into steam—and with plenty of pressure. For this purpose M. I. T. has gone into optics and is learning to concentrate sunlight with paraboloid reflecting mirrors to temperatures of 6,000°!

Hot enough to melt rocks and metals!

Thus the first big-scale attempt to harness the sun, with all branches of science working together, has made the possibility of solar power to do our work a strong, and close probability. In case you're worried because there isn't a lot of sunlight in your part of the country, enough falls on the state of New Mexico *alone* to furnish *100 times* the energy supplied the *whole* United States from coal, oil, and water power *combined!* *Rap.*

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THAT CREAM'S TOPS! SO COOL IT EVEN HAS THOSE TENDER-SKINNED SOUR-PUSSES AT THE CLUB SMILING FOR A CHANGE!
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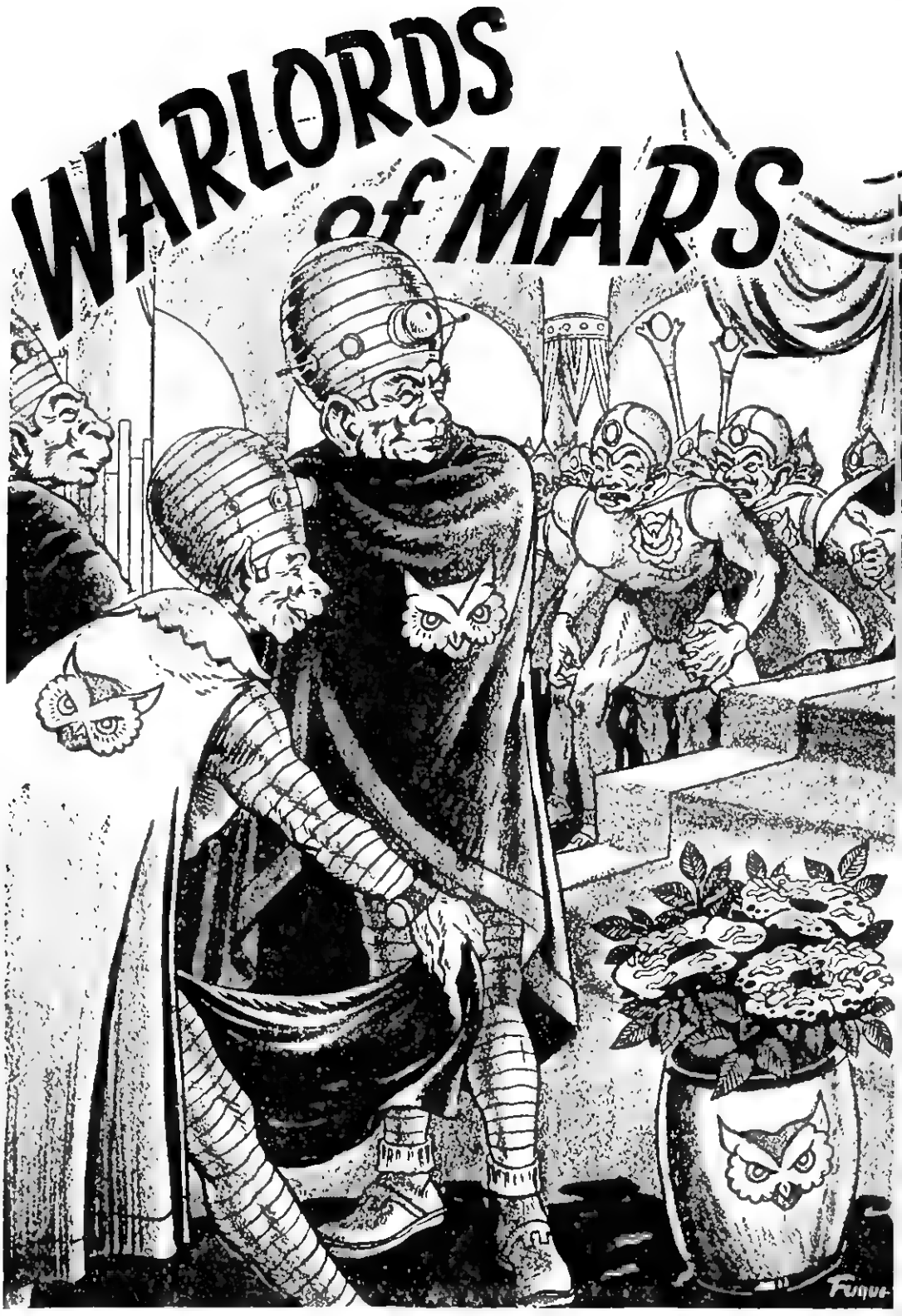


"Your Majesty," said the delegate, 'Our gift to the Princess Wimpolo!"

BY FESTUS PRAGNELL

Don Hargreaves didn't want to fight the warlords of Mars, but he couldn't ignore a Princess' promise

DON HARGREAVES shook his head as he sat beside Professor Winterton. "They are like children," he said. "Always picking fights. Just look at King Usulor now. He's bristling like a game-cock."

Professor Winterton nodded, looking all around the great palace reception hall. "I don't like it at all, Don. Things are pretty upset in Mars. There might even be a war."

Hargreaves gripped Professor Winterton's arm. "Look," he whispered. "The Princess Wimpolo is coming in." He pointed to the ornate entrance to the palace.

Accompanied by a retinue of servants, the newly arrived princess walked toward her position in the reception hall. By earthly standards she certainly wasn't beautiful. Like all Martians, she was over ten feet tall, and her body was correspondingly proportioned. She was sinuous and graceful, in spite of her size, which on Earth would have made her so heavy she

would have been unable to walk. Here she moved gracefully and easily, with a certain exotic charm notwithstanding her unlovely features.

A rather horrifying touch was the huge snake coiled about her shoulders. It was her favorite pet.

She had barely seated herself when King Usulor began shouting into his television transmitter. In nearly every home in the underground world of Mars he could be both seen and heard.

"I, Usulor, ruler of the mightiest nation in Mars,* greet you all. By the wise rule of the aristocrats, of whom I am the greatest, peace and order has been preserved in our sunless world for a hundred thousand years. And once every year I, as leader of the aristocrats of Mars, require that every lesser king shall send a token of his esteem and of his loyalty to me, his overlord. That day is the birthday of my daughter Wimpolo, she who has been chosen by the judges as the most aristocratic lady in all Mars.

"In honor of her birthday I have received beautiful presents from all the other kings. All, that is, but one. The party sent by that king is, I suppose, delayed by some untoward event; maybe a fall of stones from a cavern roof, an outburst of lava, or an attack by snakes.

"For his own sake I hope there is some such reason for his lapse. After a hundred thousand years of peace it would be unfortunate if I had to destroy the little kingdom of Ossalandoc. Let Ossalandoc take care. King Sommalu of Ossalandoc! I am calling you. Why has your party not arrived?"

In the sphere of vision King Sommalu appeared in answer garishly decorated. From the point of view of the few earthmen who watched there was little to choose between the two glaring, frosty-eyed giants. One was as bad as the other.

"Does the mighty Usulor need gifts from the little kingdom of Ossalandoc?" Sommalu asked sneeringly.

Don Hargreaves gasped. This was dangerous insolence.

Usulor shouted no more. His voice was cold as steel.

"So you defy me, Sommalu?" he asked.

"No," came the mocking voice. "I am benevolent. I give alms to the needy. Rouse yourself and open your bleary eyes. Your present has already arrived."

Usulor and all his court wheeled round. A party of five men were just entering the courtroom of the overlord of Mars.

AS the glittering throng looked at the small party a startled hush fell upon them. For the representatives of King Sommalu were dressed entirely in dark green. Green is the color of death, of mildew, verdigris, and decay, in the damp, sunless caves of Mars. Upon their heads were the helmets that Martians wear to protect themselves from the stones that are continually falling from cavern roofs. To wear helmets here was an insult to King Usulor, suggesting that his palace roof was unsafe. Upon the ambassador's tunic was

* Within Mars are many nations, each with its king, its nobles, its middle classes, and its working masses. The kings themselves are graded in an exact scale, up to Usulor at the very top. This system had kept Mars rigid for a hundred thousand years. In a world where there was no day, where it was always night, where there was no summer or winter, nothing ever changed. Everything remained the same, century after century.

In all that time the only event of real importance had been the arrival of a few men from distant Earth to scratch the abandoned surface of Mars for rare metals. A few of these, among them Don Hargreaves and Professor Winterton, had found their way down into the deep tunnels where lived the inhabitants of a planet thought to be void of life. (See "Ghost of Mars" in the December, 1938 AMAZING STORIES.)—Ed.

painted a white Martian bird, something like an owl. A Martian owl is the symbol of old age and barrenness. It meant much the same as though the cover of the huge present being wheeled in had borne the words: *For the Old Hag*.

There was a sound as of the clashing of knives. Usulor and his daughter were gnashing their huge teeth.

To the platform where Wimpolo sat among the statues, flowers and pictures that had come from the other kings of Mars the party made its way.

"Power to Usulor!" said the ambassador, formally.

"How did you get in unannounced?" Usulor demanded.

"There were no guards."

"What?" roared Usulor. A thousand soldiers were permanently stationed at his gates. What had happened to them? Was the palace undefended? He rapped out orders to an attendant. The attendant began to televise on the palace private system calling officers and officials.

Meanwhile the ambassador whipped aside the green cover. Sommalu's present to Princess Wimpolo and his token of loyalty to Usulor was revealed. The place rang with screams.

For what was revealed was a shrub growing out of a barrel. Its bright yellow fruit were deadly poison, and its leaves and flowers gave forth a vile odor. Thousands of blue bugs with a horrible habit of laying eggs under human skins and causing huge maggoty ulcers began to crawl over the floor among the guests.

Usulor leaped to his feet.

"Clear the hall! Everybody get out of the room until the poison plant and the ulcer-bugs have been destroyed. Mobilize the army! Get ready to attack Ossalandoc! Throw these men," he pointed to the ambassador and his retinue, "into jail."

Nobles rushed out. Armed attendants advanced upon the little party from the offending kingdom. The visitors stood stolid and defiant. The ambassador pulled a small flute from his belt and placed it casually to his lips.

"Stay!" said Princess Wimpolo, to her father. "You are hasty. These men only obeyed orders. Let them go."

King Usulor considered a moment.

"As you desire," he decided. "They may go. I am just."

The ambassador put his flute away.

"Power to the Princess," he said. "You have been wise, and you have been very lucky."

Gusts of mocking laughter swept through the palace room. With the place almost empty, they sounded very loud. From the television sphere they came. It was Sommalu, roaring with laughter.

"Power to Usulor," he laughed. "Bugs to Usulor. Ha! That was funny."

"Laugh while you can, Sommalu," growled Usulor. "Tomorrow you will have no kingdom."

Sommalu's laughter faded. His voice rose to a scream. His eyes took on the fixed stare of a fanatic.

"Do not attack me, Usulor. I warn you, do not attack me. If you do it will be the end of your kingdom, the end of your overlordship, the end of the present order in Mars.

"I am prepared. Too long we independent kings of Mars have submitted to your tyranny. You have oppressed us, you and your aristocratic caste. You have kept the poor in servitude. You have admitted the earthmen to Mars, letting in terrible dangers. I say your rule must end. It *will* end.

"Where are your guards, Usulor, the guards who should be surrounding and protecting your palace? Note their

condition when you find them. As they are so will all your army be, if you attack me. Your power and your oppression are ov—"

Usulor shut off the television.

DON HARGREAVES and Professor Winterton went back to the home provided for him and other Earthlings at the back of Usulor's palace.

"What did you think of it?" he asked Professor Winterton.

"I don't like it," said the grey-haired Professor. "These Martians have lived in peace for so long that they must almost have forgotten how to fight. Their weapons must be rusting with disuse. And Sommalu sounded pretty confident. He must be well prepared."

"And we thought Mars to be a world of peace!"

"Yes. Seems we left Earth in too big a hurry, Don." *

A light glowed on a instrument panel. A gigantic Martian attendant threw a key. Sibilant Martian words whistled out of the speaker. Their speed ** beat Don, but Winterton got the meaning.

"My hat! Princess Wimpolo is asking for you, Don. She wants to see you at once in her apartment."

Don Hargreaves made his way with thumping heart to the Princess' apartment. He wondered if the summons had anything to do with the threatened war, but could not see how it fitted in. He hoped she didn't want to adopt him as a pet. Martian ladies often did this. The tiny bodies and beautiful faces of Earthlings made them in much demand for this purpose. Don thought it humiliating.

Princess Wimpolo lay languidly on a couch.

There were no windows to the apartment. Pale blue light came from the walls, and fresh air, carefully purified, through gratings in the floor. Her favorite snake was coiled around her body. She fondled it as she spoke. Upon its head was a natural searchlight which it could turn on and off by an effort of will.

Don watched the snake uneasily. He never quite trusted these enormous reptiles, with their habit of yawning with two-foot jaws and inward-curving teeth.

Beside the couch was a zekolo, a creature equally huge and fearsome from Don's point of view. Its body was covered by a huge bivalve-shell, like an oyster, and between the edges of the twin shells stuck out long octopus-like arms with pincers at the ends. Those pincers could easily have cut Don in halves.

"Power to Princess Wimpolo," said Don formally.

"You needn't salute me," said Wimpolo. "I detest being saluted. On state occasions I must put up with it, but in my own rooms— Come close to me. Look into my eyes."

Don did as he was told. Her eyes, large as they were by Earth standards, were warm and full of understanding.

* Earthmen who went to Mars and remained too long in the Krypton-laden atmosphere became forced exiles because of a change in their blood which made return impossible. This condition is similiar to the "bends" which divers get if they come up out of the water too quickly. Nitrogen is dissolved into the blood under pressure, and when the pressure is removed suddenly it is given up again, forming bubbles. The Krypton on Mars behaves in the same way. Krypton is a gaseous element (also found in Earth's atmosphere, in a minute proportion of one part in twenty million) and appears to be very similiar to argon, helium, etc. Its molecules are made up of single atoms, and its atomic weight is 82.9. Krypton samples have been liquefied and even solidified. The solid melted at —169° C. and the liquid boiled at —152° C. Its critical temperature (i.e., the highest temperature at which it can be liquefied) is —62.5° C.—Ed.

** Due no doubt to the different structure of their brains from ours, Martians can talk and listen to each other at the same time. They do not speak, wait for a reply and then speak again. They go straight on with amazing rapidity, two or three or even four of them at the same time keeping up a continuous stream of sound.—Ed.

"You come from Earth, where men live on the surface, and where there are many wars?"

"I do."

"I'd love to visit your world. But it is impossible. The krypton in my blood would dissolve out in bubbles and kill me if I attempted it."

"You wouldn't like my Earth," he said. "You would find the strong gravity a crushing strain. The light of the sun would be blinding to you. You would have to wear dark glasses. But the greatest strain of all would be our variable weather, the heat of our summers and the cold of our winters."

"Yet you love your world, little Earthling. You would like to be back there."

"I would. I miss the sun, the moon, the stars, the clouds, the green grass, dancing waves, cows, rabbits oh, a million things."

She looked at him strangely. "You have been told that I am very reserved and haughty, Earthling."

"Yes."

"It is only because I feel that terrible dangers are hanging over our world. I have no time for foolish revels and ceremonies. One day I shall be queen of all Mars, unless Sommalu wins. Then I shall, perhaps, choose an Earthling as my king.

"But I fear Sommalu. He has been preparing this. He has been conducting forbidden research. He has ground the poor of his country down to poverty to build up armaments. He broadcasts lying propaganda to his people, telling of the supposed oppressions of my father and the aristocrats. He is dangerous. Listen to this."

The giant Princess threw a switch. Curious throbbing music began to pour into the room from a hidden source. It had a curious effect of Don's nerves, filling him with a strange elation.

"How does that affect you?"

"It is exciting. I feel adventurous. I want to do dangerous things."

"Exactly. Its influence is still stronger upon Martians, for it is scientifically designed to match the natural vibrations of their brain-cells. That is Sommalu's broadcast. His secret science has mastered the art of controlling the feelings of men by music, vibrating their brain-cells so that they respond to the urge to do as he wishes. A little increase in the strength of those notes, and he could set his whole population howling for war."

"Can music do that?" Don gasped.

"Do not your Earth armies march to music? Our electric musical instruments have an infinitely greater range of notes, tones and overtones than your wind and string instruments on Earth. Whole populations can be enslaved by this means. I can even control the feelings of reptiles and insects.

"Another thing, too. Always we aristocrats have set ourselves to breed men who would be of placid temperament. It is a matter of the adrenal glands,* which rest on the tops of the kidneys. I have learned that Sommalu has bred large numbers of men with large adrenals.

"Last of all, he has developed some secret weapon. Somehow he can blast the intelligence from the brains of men, leaving them helpless imbeciles, scarcely able to speak. "That is what happened to all my father's court guards today. They were found wan-

* What Princess Wimpolo says is perfectly true. Persons with large adrenal glands find their energy comes in spasms. They hate steady work, but love fighting. They are lazy and quarrelsome. Those with large thyroid glands and small adrenals work hard and patiently, but when danger comes they succumb to fear. The most ferocious of all, the tiger, has enormous adrenal glands. Cows, on the other hand, have small adrenals A cow injected with hormones from adrenal glands, would attack as fiercely as a tiger.—Ed.

dering like men dazed. They did not understand when they were spoken to, seemed not to know their own names. They are as helpless as babies.

"People who were nearby say that notes were heard on a flute, and two blasts on a whistle. After the second blast the soldiers began to drop their weapons and to behave strangely."

Don Hargreaves looked puzzled. "Why do you tell me all these things?"

"Listen, little Earthling. I sent for you because I know you are a very brave man. Single-handed, you fought the mutineers in the mines on the surface.* Your adrenals are larger than any in my father's kingdom. You can fight without fear. Will you perform a dangerous mission for me?"

He stammered, embarrassed.

"I am not so brave as you think."

"But if the reward was—myself? To be king of all Mars one day?"

"You promise *that,* to *me?*" He was incredulous.

"I do."

Strange feelings beat in his breast. Her outsize Martian features were not beautiful, but he felt now that she was a lonely spirit, an exile among her own people. He could sympathize with that.

"I will do whatever you ask," he said.

"Promise?"

"I promise."

"Very well then. I am going into Ossalandoc, into Sommalu's country. I am going to find out what his new weapon is, how he turned those soldiers into imbeciles. I shall travel as an ordinary wealthy woman, with no company but my snake and zekolo, and you. I shall take you because I can trust you better than I can trust any Martian, and because you are brave. And also because you can slip through places where a Martian would be stopped. If I am in danger I shall send you back with a message to my father."

"But this is dangerous. It is reckless," he said.

"You promised."

"If your father knew he would blame me for not informing him."

She stood up, proudly.

"You scorn my reward!"

He looked at her. "I will come," he said.

CHAPTER II

In Sommalu's Country

THEY set out in one of the fifteen-foot transparent spherical autos of Mars, running through the green metal-lined tunnels that serve as one-way traffic lanes throughout Mars.

Wimpolo took her snake and her zekolo. There was nothing unusual about this, any more than if an Earth lady took with her a pair of lapdogs. Dangerous as they looked, they were perfectly docile unless ordered to fight. And they gave protection against the wild snakes and other monsters that swarmed in the smaller caverns. And Don himself was only another sort of lapdog.

Don was not easy in his mind about the business. The Princess was being very silly to go spying in the land of her father's enemy. Spies are very liable to come to a sticky end. Still, perhaps it was easier on Mars.

In any case, was the quarrel between lesser King Sommalu and greater King Usulor any of his business as an Earthling? Ought he not to be neutral? If Earthlings fought against Sommalu and

* In the "Ghost of Mars", December, 1938 AMAZING STORIES, Don Hargreaves put down a rebellion of the miners from Earth, who had occupied the surface of Mars unaware that far beneath them lay a Martian civilization. It was due to the ingratitude of the mine owners for this feat that Don Hargreaves descended into Mars to live with the Martians, where he felt he would be more appreciated.—Ed.

Sommalu won, it might be bad for other Earthlings besides those who went fighting. Sommalu was known to be already hostile to Earthlings.

However, he couldn't forget what Wimpolo had promised him. That one day he would be king of Mars. She seemed to have forgotten that now, sitting in the square apartment that hung from the axle of the transparent sphere, taking no notice of Don, but fondling her reptiles.

When they came at last into the open on the shore of the smooth, tideless, waveless ocean of inner Mars, the sphere jarred to a sharp halt.

"Go no further!" warned a blue-clothed official. "King Sommalu has sent an invading army into our country, and his outposts are only a little way ahead."

Wimpolo looked indignant and went on.

Soon they were stopped. Don recognized the badge of Sommalu, the four-headed snake, on the tunics of the men who surrounded them. All wore cavern helmets and carried black boxes. These black boxes produced the penetrative rays that halt the chemical processes of nerves, bringing thought and the consciousness of brains to a standstill either temporarily or for all time.

"Let me pass!" Wimpolo ordered. "I am a high-born lady."

The soldiers grinned, showing great pointed teeth.

"She's a high-born lady!"

"Ray her!"

"Cut her ears off!"

Princess Wimpolo was roughly dragged out of the sphere. Don saw her frightened face. The adventure she had sought was too real for her liking.

"Dump her with the other prisoners," ordered the leader.

Wimpolo was hustled away, the soldiers twisting her arms and laughing at her cries. Large adrenals seemed to produce a very different kind of Martian from the amiable giants that Don had known up to now.

At sight of Don the soldiers gave a great shout.

"It's one of those little men from Earth!"

"Queer little creature!"

"Look at his little nose!"

"Look at his tiny ears!"

"How can he breathe?"

"Don't Earthlings grow any bigger than you are?"

Despite the strangling grip on his throat, Don managed to gasp out, "A little."

"It talks!" they shouted in delight.

"They tell me," one said, "that you can throw one of those things as high as you like in the air, and they never get hurt. Always land on their feet."

At once, they decided to try it. The biggest of them seized Don by one arm and swung him. Don clung on desperately. A great box on the ears from the Martian nearly knocked him out.

Slowly, so slowly, in the light gravity, he sailed up and up until the Martian soldiers were far below. Then, still in the most leisurely manner, he drifted down again.

At last he landed, luckily on his feet, let his knees bend and rolled over. He was jarred and bruised by sharp rocks but not badly hurt.

The soldiers roared with delight.

"Throw him higher! Make him spin. See if he can still land on his feet!"

Don ran for life.

"Come back, Earthling!"

"We want a lot more fun out of you yet!"

But Don was away. Each step carried him ten feet. The slow, lumbering feet of the Martians could get nowhere near him. They lost him in the darkness, swinging their searchlights

and deathrays into action too late.

Don reached a cave and sat down. Wimpolo's spying had ended, at the very beginning, in disaster. He could not fight all Sommalu's giants to free her. Neither could he go back to Usulor. The father's anger might be terrible.

For a long while he sat still, trying to think. Suddenly, from quite close, a small yellow searchlight shone full on him. Thinking himself captured, he froze with fear. Then he realized that this light was not carried by human hands. It was one of the small natural lights carried on the heads of the carnivorous snakes that lurk in the small, unexplored caverns.

Now he was hopelessly doomed. The giant reptile's elastic jaws would stretch and stretch until it swallowed him whole. The only hope was to keep absolutely still, in the faint hope that it would not be hungry.

Cold scales slithered over the rocks, brushed against his legs, slid around his body. A reptilian face rubbed against his. A long tongue licked his nose. A tiny foreleg tickled him under the chin.

He heard a rattle of a zekolo's pincers on the rocks. Hope rose. The chief business of the life of these crustaceans was to fight the snakes, whom they cut in pieces with their pincers. But the zekolo only rubbed itself against his legs, and against the snake.

At last he understood. They were Wimpolo's pets, and they had followed him, smelling out his tracks as a dog does.

DON came out of the cave and prowled around. Away from the lights it was difficult to pick his way, except when the snake turned on its natural searchlight. Prowling around, watching, he saw Wimpolo and a number of other well-born prisoners from the captured territory shut in large spheres and carried away. He wished he had a raybox, but he was unarmed. He could do nothing.

A peasant woman gave him food. The little he ate was but a mouthful to her, and he knew which of the Martian food was good for an Earth stomach and which not. Grantan, capital city of Ossalandoc, he found was about thirty miles away by Earth reckoning. That was not a long journey in the Martian conditions. Wimpolo, he reasoned, was most likely to be there. Don set out for Grantan, the snake and the zekolo following.

Nearer to Grantan it was more difficult to make his way without being seen. Lights were everywhere.

He saw Grantan, an ugly city built where the cavern roof was low and mighty pillars could protect the houses from falls of rock. The houses extended right to the roof, one solid block. A massive, brutal-looking city.

He was stopped by a soldier.

"Who are you, Earthling? Where are you going?"

He began to fear that he might be thrown into the air again.

"I'm lost," he said.

"Where's your mistress?"

"She was captured in the invasion and carried away."

In the rapid, efficient Martian way, the man raised his arm and telephoned his superiors, speaking into the tiny instrument attached to his wrist.

"My officer says there should be no Earthlings in Ossalandoc," he said presently. "The King does not like them. You are to be taken to the palace."

Don was picked up by the scruff of his neck and carried to a waiting sphere. A Martian got in and the sphere began to move. The snake and the zekolo were left behind.

CHAPTER III

In Sommalu's Palace

THE sphere entered the city via a tunnel that served as a street. Inside there was nothing to be seen but signs and side tunnels. They stopped, and a Martian in a blue uniform looked in, saw Don and lifted him out by the scruff of his neck.

He was carried into a room where a number of Martian men and women were noisily enjoying themselves. Sommalu himself lay on a couch. He was a lean, pale Martian with a wild, staring look in his bleary eyes.

"Here is the Earthling from Usulor's court!" bellowed the Martian who carried Don.

"I know you, Donald Hargreaves," growled Sommalu. "I have watched you in the television and I have reports from my spies in Usulor's country. You brought Wimpolo here to spy on me. You cursed Earthlings are the only factor in the situation I have not got under control. You are the only people I am afraid of, because I do not understand you. I shall destroy every one of you, like this!"

Don found himself seized by the neck with one huge hand and around the face with the other. Sommalu began to twist and pull as one might wring the neck of a chicken.

Somebody said to Sommalu, "Let's have some fun with him first."

Pressure on Don's neck relaxed just as cartilages and blood-vessels were about to snap.

"How?" growled Sommalu.

"We saw the soldiers play with him when Wimpolo was captured. These Earthlings are remarkably agile. They can be made to do tricks."

"Is it safe to let him live?" growled Sommalu. "He was a friend of Wimpolo's and a favorite at Usulor's court. For that alone I hate him. How do I know that the poisons of my new fighting flies will affect Earthlings with their different constitutions from ours? They might produce unknown weapons from Earth. They might cause Earth to send an invading army to conquer Mars on the plea of helping Usulor against my revolt. I do not know their possibilities, therefore the only safe way is to destroy them."

A Martian tried to pacify him.

"Nothing can stop the mighty Sommalu. The genius that raised a factory worker to be master of a mighty nation will make him master of all Mars. The secret of your fighting flies has been well kept. Already five men turned thousands of picked soldiers into helpless imbeciles in a few seconds. Princess Wimpolo is imprisoned without food. What have you to fear?"

"You are right," snapped Sommalu. "Make him do tricks."

Courtiers seized Don. Don, under the lash of whips, was made to run and jump.

Because of the light Martian gravity he could perform feats that were remarkable to the massive Martians. He could jump high over their heads, turning somersaults as he did so. To escape the lash, he did his best to amuse them. He did cartwheels, handsprings backwards over their heads. He balanced himself on one hand on a Martian's shoulder.

"Climb that wall!" ordered Sommalu, pointing.

It looked impossible, but by the aid of curtains, furniture and carvings he reached the ceiling. He swung by one hand from the grating that let the used air out of the room. He misjudged the strength of the grating. It broke away in a shower of stones and plaster.

"Put that grating back!" roared

Sommalu, furiously.

Don tried to climb, carrying the heavy grating. He could not. A Martian got a rope, tied one end around his waist and the other to the grating. Don climbed up, got into the hole and began to haul up the grating. Around him the ventilation space between two floors made a dark, dusty gap through which he might crawl on hands and knees like a rat in an Earth home.

It was the only way to get away. He dropped the grating and began to crawl.

A LONG way he went in the darkness. Behind him the shouts of Sommalu's courtiers faded away. Short of pulling down a whole section of the palace, he did not see how they could find him.

The only light came from gratings where air was admitted into or out of other rooms. There were water pipes and insulated wires around him. The ventilation spaces were a labyrinth of passages. He found a loose grating under a larder, got out, helped himself to food and darted back under the floor as a Martian maidservant came in.

"Now I really am a rat," he thought.

For hours he wandered about these inter-floor spaces, listening to chance conversations and wondering what to do. It was a very long time indeed before he got what he wanted, a clue as to where Wimpolo was held captive.

"How are the prisoners?" he heard somebody ask.

"Quite safe," said a blue-clad guard.

"And the Princess?"

"Being kept without food until she agrees to the master's orders. She is in the next room, still proud and haughty. She has not spoken since she was brought here."

Don found the room where she was, and called to her through the floor grating. She lay listlessly on a couch, looking depressed and weak. At his voice she stirred and looked around.

"It is I , Don, your Earthling. I am in the space under the floor," he called.

Wedging a chair leg between the bars, she pulled up the grating and Don's dusty figure came through.

He told his story.

"Can I help you?" he asked.

"I'm starving," she said weakly. "Get me food."

"Certainly." He went back under the floor, found the larder, raided it and brought the food to her.

"That's better," she said presently. "Being small helps you. You can get through these grating holes. I cannot."

Suddenly she screamed. The head of a huge snake showed out of the grating hole. The reptile slithered in. It was her own pet snake. Following Don by smell, and perhaps by some uncanny Martian reptilian sense, it had trailed him here. Its long thin tongue licked its mistress's face affectionately. A rattling under the floor told them that the shell-backed zekolo was here also.

Suddenly a step outside the door told them that somebody was coming in.

Don dived under the Princess's couch. He did not see where the snake got to, but it vanished. The door opened. Sommalu, in resplendent uniform, came in, looking pleased with himself.

"I heard voices," he said, looking around. "What was it?"

"I may have been talking to myself," said Wimpolo.

"So you found your tongue at last?" His eyes fell on the fragments of food. "What is this?" he roared. "Who has brought food here?"

He shouted at somebody outside. Two frightened guards appeared. They denied the charge, looking bewildered at the sight of the crumbs, bones and fruit skins on the floor.

"You lie!" bellowed the angry ruler, calling soldiers. "Take them away! Show them what it means to defy the mighty Sommalu!"

The terrified guards were dragged away. Sommalu folded his arms and glowered at the Martian girl.

"If you saw what will happen to them you would not be so stiff-necked, Princess. You cannot wheedle me with your charms as you wheedled those fellows, to their own misfortune." He turned again to the door. "Bring in the long-distance televiewer."

The machine was a ten-foot globe of mirror glass set upon a stand. Two blue-clad guards wheeled it in.

"Your father has sent his army against me," Sommalu said. "In a few minutes it will come within sight of my defense guard. When you see how that great force will melt away before my men you will be more ready to agree to my suggestions. Be my queen, secure me a standing among the aristocrats, and you can have again all the luxury you once knew."

"And you tell your people you are going to rid Mars of the aristocrats," she sneered.

"I am going to rule all Mars," he said. "Nothing can stop me."

He sat beside her on the couch, his arm round her waist in mock affection as she sat, rigid and defiant. A wave of his hand signaled for the televiewer to to be switched on.

Now, looking into the five-foot sphere, they seemed to be looking through a hole into an enormous cavern that stretched for many miles before them. In the distance a number of huge spheres, hundreds of feet in height, were rolling forward. Above them flew many huge airships. In the foreground lay Sommalu's soldiers awaiting the attack.

"You must be mad," said Wimpolo. "Those spheres of my father are of a metal, the atomic adhesion of which is so strong that no force, however great, can damage it. No ray can penetrate it from outside. Yet deathrays from inside are not obstructed. They will not need to fight your little force. The spheres will simply roll over them and crush them."

"We shall see," said Sommalu, laughing confidently.

Steadily the mighty army rolled and flew down upon the few helpless-looking men who awaited it. From their clothes shone a bright blue light. They were not even trying to hide.

Abruptly, there came the notes of many flutes. Don blinked in surprise as millions upon millions of tiny flies streamed into the air. Up toward the cavern roof they swarmed out of sight. A pale light, visible to the television only, followed them. Usulor's force took no notice of them, interested only in the men on the ground.

To the notes of whistles the flies flew on. Reaching Usulor airships, some were caught in the rushing wind of the ships' progress, landed upon them and sought out tiny holes, crawled in through them.

Slowly a horrible transformation came over the faces of the airmen. Eyes that had been staring intently, judging distances and aiming, became blank and stupid. Firm jaws sagged listlessly. Men rose from their seats and lurched around, wondering and questioning in their faces, while their ships crashed down to ruin and death.

Meanwhile, other flies reached the battle-spheres. In through tiny holes in the sides they crawled, air-inlets or any other hole. Men ignored them until they were bitten, then slowly all semblance of intelligence faded from their faces.

Spheres stopped, or wandered aim-

lessly. Many collided and were destroyed. Crews got out and staggered about, making uncouth noises as though the means of speech had been taken from them and they were back at the baby stage again.

Sommalu's men, with shouts of glee, jumped up and rushed at them with daggers. The bodies of the helpless soldiers of Usulor they ripped open with their daggers. Usulor's men, not understanding, stared with hanging jaws while their comrades were cut open and the knives advanced upon them.

The butchery went on. Not one of the victims tried to fight or even to hide or turn away from the blade. They stood and stared and fell. In death their eyes were full of a great wonder.

"You see," gloated Sommalu. "My fighting flies inject into men's veins a poison that destroys all memory. Those men forgot who they were fighting for and whom against. They forgot even that they were fighting at all. Now are you convinced that I must soon be master of all Mars? Will you be sensible? Or must I bring your father before you, helpless and stupid as those soldiers were before they were killed?"

Livid with rage, Wimpolo howled a Martian insult at him, not at all aristocratic, and struck him on the mouth.

Furious in his turn, he seized her wrist and began to twist. All at once she went limp.

A commotion under Sommalu's feet made him look down in surprise. Don Hargreaves was coming out of his hiding place.

CHAPTER IV

Broadcasting Station

DON HARGREAVES had been very nervous, under the couch, for fear of discovery, but now his adrenal glands had taken charge of him. The merciless slaughter of Usulor's army and the painful wrenching of the arm of Wimpolo who, though a giant, was still a girl, roused him to fury. His adrenal glands poured their hormones into his blood. He no longer felt afraid, but was full of a cold, fighting energy.

Leaping high, he lashed out with his foot. The kick caught Sommalu full on the mouth. The force of his own kick sent Don tumbling to the floor again.

The two guards rushed at him with outstretched hands. He jumped right over their heads. Then, pivoting on his heel, jumped again and kicked one of them heavily in the back of the head before he could turn.

Again they rushed. Again he jumped over them and gave one a heavy kick on the back of the head. Small as he was to them, his kicks must have done them no good. The enormous Martians were bewildered at his speed and agility. They picked up the backless stools they had been sitting on, and advanced.

Now he knew he was trapped. He could not jump high enough to clear their arms with the added reach the stools gave them. He was forced into a corner.

"Stand back! Let me ray him!" roared Sommalu, aiming the deadly black box. His mouth was bleeding.

Something flashed through the air. Wimpolo's snake had come out of its hiding. Sommalu was tossed aside, his raybox smashed. The two guards did not stay to fight the snake: they ran out of the door and shouted for help.

Under the floor the zekolo was heaving mightily in an effort to break its way out and join the fight. Don saw a way of escape. Locking the door, he managed to get the snake to understand that the Princess must be pulled under the floor, through the enlarged hole the crustacean had made. She was a ter-

rific weight to pull through, even in the Martian gravity. The ceiling of the room underneath, already strained by the efforts of the zekolo, could not stand it. It broke. Don and Wimpolo fell in a shower of building materials, into the room below.

Don landed on a table, sending food flying in all directions. Wimpolo landed awkwardly and painfully on a Martian's head, knocking him backward. To the dim intelligence of the reptiles above it appeared that she was being attacked again. Snake and zekolo swarmed down to her defense. Two of the unfortunate palace servants were killed by the rib-crushing embrace of the snake and three had arms or legs cut off by the pincers of the zekolo before they got away. The peaceful kitchen was turned into a slaughterhouse.

Don and Wimpolo, who had fortunately recovered her senses, fled down a passage. At the end was a guard. Wimpolo whispered to the snake. So stealthily did the snake glide that it seemed to disappear. Something flashed round the distant guard's head. The snake wrapped itself round his mouth and throat, then, lifting him in its coils, banged his head sharply against the wall.

Don picked up the unconscious man's raybox as they ran by. Ahead was a room full of machinery.

"Sommalu's broadcasting plant," Wimpolo whispered. "This is a lucky break."

The captured raybox, operated at half strength, stretched guards, engineers and musicians unconscious even before they knew they were attacked. Don posted himself at the door of the studio, ready to deal with interruptions, while Wimpolo inside proceeded to broadcast according to her own ideas.

And those were curious ideas, it seemed to Don. A series of thin, reedy notes like the scratching of slate-pencils, was all he heard. How they could have any effect on human feelings, let alone neutralize the effects of Sommalu's own broadcasts and make his dupes turn on him, Don could not understand.

He was busy, too. The interruption of the program had sent many people to inquire the cause, and while he could ray the first-comers and stretch them in sleep, those behind saw them fall and gave the alarm.

He expected an attack by a swarm of fighting flies. A cloud of millions of them, all over the broadcasting station, would keep him very busy swishing his ray about to keep them off. Especially if they put the lights out, relying on the power of the insects to see in the dark.

But what came were soldiers clad from head to foot in armor, armor exactly like that once worn by King Arthur's knights, but made of glass. He knew at once that it was a special, ray-proof glass.

Wimpolo was now broadcasting notes obviously suitable for human ears, and calling on Sommalu's subjects to rise against the tyrant. That stopped. He watched the advance of the glass-armored giants in silence. He was ready to die because he knew he would.

SUDDENLY, Don was snatched off his feet. So startled was he that he dropped the raybox. The snake had whisked him up in the air, to the top of the banks of machinery. Wimpolo was there too, riding on the shell on the back of the zekolo.

They crawled along the tops of the instrument banks. In the ceiling was a very large grating. It occurred to Don that Wimpolo and the zekolo could get through it, and that perhaps, seeing how solidly the place was built here, find hiding large enough for all of them in

the space between the two floors.

The snake went first, vanishing, in its stealthy way, out of sight. The zekolo followed, Wimpolo followed, and Don came last. The Princess was very cramped, but otherwise there was room for all. However, it would have been dangerous for her or the zekolo to move about much.

Don and the snake went on an exploring trip. A little way along they found themselves under a richly furnished bedroom. So well furnished was it that he decided it must be the bedroom of Sommalu himself. The snake seemed to smell out its enemy, who had twisted the arm of its mistress, and it heaved up the grating to glide to the top of the four-poster bed, waiting, out of sight. Don climbed up too, and hid.

Sommalu came in. A pet snake followed him. Instantly he began to work the televiewer.

In the small sphere showed the face of an officer of the army. He looked haggard and worn.

"Our flies have turned on our own men. Some strange music made them do it. Our army is wiped out!"

"What is the situation in the city?" asked the King, in a weary voice.

"Usulor's second army is advancing rapidly. We have no force now to send against it. A revolutionary mob is advancing from our rear."

Sommalu was a tired and hopeless, but vindictive man. "Do nothing until I give the order, and then let the big rayguns wipe them all out together. At least I'll finish them, if I can't do much about Usulor. Is it quite certain that we have got his daughter in an air-tight trap under the floor?"

"Quite certain. We can see her and the shell-back in the penetrating viewray."

"Then tell the officer in charge of the gas-plant to start pumping in the poison gas. At least Usulor shall have something to remember me by."

The face faded out.

Sommalu looked round to see what his pet snake was hissing at. This creature, even larger than Wimpolo's, had spotted the other reptile on the top of the bed. The two snakes hissed at each other with a hatred equal to that of the men in charge of them.

Sommalu barked an order. His snake raced up the end of the bed to do battle. Two giant reptiles were at once locked together, each trying to crush the other in its great coils. Their movements jerked aside the curtains. Don found himself staring straight into the eyes of the amazed Sommalu.

"You!" said Sommalu, slowly.

HE reached for his raybox on the table. Don gave a great spring. On no account must the angry monarch be allowed to reach that deadly box. He landed on the table, not quickly enough to pick up the box himself but in time to kick it across the room and still avoid the giant's reaching hands.

But on the wall was a huge pair of crossed swords, a pair of daggers beneath. Sommalu drew a sword. It was heavy and curved.

"See if you can dodge this," he snarled.

Don leaped over the bed. He ducked under the table, round a chair. Sommalu, breathing heavily, realized that he stood no chance of catching the agile Earthling while the room was full of furniture. He began pushing everything against the wall with his feet, menacing Don with the sword meanwhile. The bed was too heavy for him, but he solved that problem by chopping it down with the sword.

The battling snakes crashed to the floor. Don saw that Wimpolo's snake

had glassy eyes from the pressure of the greater reptile, but its jaws, stretching incredibly, had half engulfed the head of the other.

"Now see if you can escape me," Sommalu growled.

Don managed to draw one of the two daggers out of its sheath. To him it was a fairly respectable sword. But he could not leap over Sommalu's head without being impaled on the way.

Sommalu lunged. Don slipped to one side. Sommalu tried a series of rapid stabs, but still Don was too quick for him.

Quickly changing his tactics, he slashed at Don with the edge. Don jumped, leaping over the sweeping blade. A turn of the wrist, and back came the sword, aimed at the neck. Don ducked. Then the sword swept backward and forward with all the speed the giant could muster and all the sudden swerves and changes of aim that he could invent. Don ducked and leaped. He couldn't keep this up for long without being struck.

Don tried to slip around the giant. A great coil of the struggling snakes was in his way, and he tripped over it. He saw the broadsword, point first, plunging at him to take advantage while he was off his balance. Sommalu shouted in triumph. His eyes were wide with an insane joy.

Don shut his eyes, expecting to feel the blade, but instead the blade stuck in the timber of the broken bed.

Perhaps two, perhaps three seconds Sommalu required to pull out the embedded sword, but that was enough. Don, hurling himself forward, struck. The dagger bit deep into Sommalu's vitals.

The Martian King fell with a crash. At the same time, Don, knocked aside by an instinctive flick of his free right arm, crashed into the wall unconscious.

When he came to the rebels were in charge of the palace. They soon rescued Wimpolo, once Don had told them where she was. She was unharmed. Her snake showed no pleasure at her return. In fact, it took no interest in anything. It had made a gigantic meal, swallowing whole a snake much larger than itself, and it was in great pain.

USULOR installed himself in Sommalu's palace. An autopsy on the dead King showed that he had an enormous pair of adrenal glands. They had given him an incurably fierce fighting disposition. As a result he had, by violence and treachery, risen from a lowly position to be master of a nation, using the poisonous flies he had developed.

"Unregulated glandular abnormalities always cause trouble," a Martian scientist said, gazing sadly at Don. Don felt uncomfortable. He was thinking of the unregulated glands of Earthmen, and the prophecy of a disastrous war between Earth and Mars.

King Usulor asked: "But how did my second army win so easily?"

The chief surviving general coughed.

"We have, of course, spread the usual propaganda about our invincible army, but really we cannot understand it. Seeing what happened to the first army, we took with us flocks of trained birds to eat the flies, but even so, enough flies were bound to get through to cause havoc. Or so we thought. As a matter of fact, we lost not a ship, not a sphere, not a man. We found Sommalu's entire army lying dead with no wounds, nothing to show what they died of."

"They were stung by their own flies," said Wimpolo.

"What?"

"I have a very good ear for music," explained the Princess. "When Sommalu forced me to watch the television

(Concluded on page 146)

THE TIME-WISE GUY

By RALPH MILNE FARLEY

Did you guess right? Here is our contest story, reproduced in its original form plus the ending unpublished last month

"THERE you go again, Professor!"

The class stirred uneasily. A shadow of annoyance passed across the pleasant, kindly face of Professor Tyrrell, and the high blue-veined brow beneath his sparse white hair contorted momentarily.

George Worthey, short and round, dressed to kill, had lumbered to his feet, and had shot his usual challenge at the old Physics professor. Worthey's pop-eyes seemed to protrude even farther and his wide almost froglike mouth leered, as he repeated:

"There you go again, Professor!"

Old Tyrrell sighed patiently. "Very well, George. Step up to the board and show the class where I have erred."

With more of a waddle than a step, Worthey made his way to the platform, took the long pointer from Tyrrell's pale hands, peered at the blackboard for a moment, then grinned loosely and said, in a loud, meticulous voice, "You dropped the term $17 \times$ a step in the integration.

$$\frac{}{4^a}$$

It should go here."

The class all shuffled their feet as he returned triumphantly to his seat. It was the universal college signification of almost anything: approval, disapproval, amusement, disgust. Today it represented diversified sentiments One student yawned directly at Worthey.

Professor Tyrrell shifted his square-lensed glasses to his high pale forehead and peered benignly at his students out of watery blue eyes. But there was a certain grimness to his usually placid face, and a certain purpose to his usually pleasant mouth. He held up one slender hand to stop the scuffling.

"Mr. Worthey is quite right," he sighed. "We are fortunate to have him with us." If there was just the trace of sarcasm in his tones, the class pretended not to notice it. "Worthey, today's episode has convinced me that I ought to ask you to help me with a very important bit of research in which I am engaged. Could you come over to my house at eight o'clock this evening and help me?"

George Worthey swept a triumphant grin around on his admiring classmates.

"O.K., Professor," he replied, with a magnanimous wave of the one pudgy hand. "Always glad to be of assistance."

THAT evening in Tyrrell's study, after a few minutes of social amenities the Professor poured out two glasses of homemade sweet wine, and broached the subject of the interview.

"I have been working for a number of years on a time-machine," he declared in matter-of-fact tones.

Worthey's pop-eyes moved a little, and he shifted his large feet uneasily. Was this a gag to get his goat? Would the Professor, perhaps, get revenge on him by telling the class on the morrow how gullible he had been? He must proceed cautiously.

"*A real* time-machine, Professor Tyrrell? Quit kidding. You know perfectly well that time-traveling is the bunk. I'm a bit too bright to fall for anything like that."

"Worthey, you wrong me. Why should I 'kid' you, as you call it?"

Worthey wondered a little at Professor Tyrrell's firm tone, and some of his assurance left him. "I'm sorry, sir, if I seemed unduly suspicious. I thought that you might be trying to sound out my gullibility. Well, shoot! I'm willing to argue the question of time-traveling, or any other question, with you any time."

Tyrrell rubbed his thin hands together and there was a strange gleam in his kindly eyes. "Now we're getting somewhere."

"All right, Prof, shoot. I'm all ears."

Professor Tyrrell ran his eyes appraisingly along the sides of Worthey's head, and nodded absent-mindedly. Worthey flushed (and brushed back his sleek brown hair) but Tyrrell, apparently not noticing, plunged into the subject.

"Perhaps the best way to begin," he said, "would be to inquire just why you consider time-traveling to be 'the bunk' as I believe you so excellently expressed it?"

Worthey studied the Professor's cherubic expression for a moment and, after some hesitation, satisfied that the man was in earnest, replied, "Time travel, in the final analysis, comes to a *reductio ad absurdum*, sir. I can't possibly —" He paused, and watched the Professor's face for some clue as to the next line to take.

Tyrrell encouraged him with, "I shall gladly argue that point with you. And I shall try to keep an open mind. I believe that 'Old Tillie', as you students call me, has the reputation of always arguing fairly, and of holding it to a man's credit, rather than against him, if he can convince me of views contrary to those which I hold. Proceed!"

Worthey was secure enough in his remarks not to care whether the Professor held something up against him or not. But he feared ridicule, and this reminder that Old Tillie always argued fairly reassured him somewhat. Cautiously, he said, "If time-traveling was possible, what would prevent a man with a time-machine from traveling back or forward twice to the same point in time and then finding himself already there?"

"Merely," Professor Tyrrell quietly replied, "that such an outcome would be obviously impossible."

"Of course!" Worthey exclaimed, grinning triumphantly. *"Reductio ad absurdum!"*

"Not at all. Rather, say, a perfectly valid exception to time-traveling, exactly as non-divisibility by zero is an exception to algebra. Do you remember the alleged proof, which confused you for a day or two—in your freshman year—that two equals one?"

He rose from his chair, stepped over to a blackboard which stood in one corner of his study and wrote down the familiar sophistry, which begins with $a = b$, and ends with $2 = 1$.

Putting down his chalk, he turned back to his student, with a grin, and added as he seated himself again, "The only flaw in that supposed *reductio ad absurdum* of the fundamental processes of algebra is that I divided by zero, which is not permissible. Thus, there is a rule which says: to travel twice to the same point in time is not permissible. What you state would be a violation of the rules of time-traveling."

"Professor Tyrrell," Worthey exclaimed, grinning widely, "you took the words right out of my mouth! I myself was just going to mention that two-equals-one fiasco *against* you. It's not exactly sporting for the mathematicians to invent, as an afterthought, the rule that you can't divide by zero, just to save algebra from having a hole knocked in it. And now *you* go and do the same thing for time-traveling! Of course, if we let you change the rules in the middle of the game—!" He shrugged his shoulders and snorted.

Tyrrell held up one slender hand in protest, but Worthey kept on relentlessly, "Take football, for instance. Even our championship team couldn't hope to play successfully against no matter how weak an opponent, if the referee had the right to make up a new rule to save the other side whenever he felt like it."

"And yet, isn't that just the effect of Rule Ten?" Professor Tyrrell mildly inquired.

Worthey grimaced. "Well—er— yes."

THE Professor continued, still smiling provokingly, "That rule was designed to prevent

smart alecks from inventing unfair tricks one jump ahead of the Rules Committee. Even if I concede that the rule of algebra and the rule of time-traveling which I have just cited are afterthoughts, which I do *not* concede, we can at least say that they prevent unfairness and thus save the game."

Cornered for once, George Worthey changed the subject. "But, Professor, how do you know that time-traveling *is* possible? And, if so, how do you know that a man can't travel twice to the same time?"

"To your first question, may I reply that *I* myself have traveled in time. As for the second, I know that a colleague of mine in Holland who once attempted to travel back twice to the same date, never returned. Of course, it may be that I have not correctly figured out the cause of his non-reappearance. But subsequently I have tried a little experiment, which seems to me to confirm my theory. I built a miniature time-machine with automatic controls, and sent it back a hundred years in time, with its controls set so as to return here an hour or so after the time of its departure. It returned. After many successful repetitions of this experiment I sent it back to *exactly* a time to which it had been before—it did not return!"

Worthey could think of no adequate reply. Indeed, he had stopped trying. How could he effectively object to any one detail of time-traveling, when time-traveling as a whole was absurd? Especially Old Tillie himself having traveled—what a laugh!

The pale blue eyes behind Professor Tyrrell's square-lensed glasses were studying his student intently. He chuckled. "Would you like to see my time-machine?" Without waiting for an answer, he lifted his frail form out of his chair and headed for the doorway. Worthey rose slowly and followed, a frown on his chubby face.

Down into the cellar of the house they went. In one corner of a workshop, there stood a distorted maze of silver rods, twisted bars of fused quartz crystal, and coils of electric wire, with a padded tractor-seat in its midst and all covered with glass. The seat looked strangely and incongruously real among all that unreality.

Worthey squinted his pop-eyes, bent his tall figure, and walked two or three times around the machine, carefully inspecting it. Then he straightened up.

"There's something quite screwy about it. Oh, I don't mean that as a dirty dig. It's a compliment. Now what the—? I get it! Look!" Worthey tilted his ungainly head on one side, and gazed at the time-machine from various angles. "The far side always seems nearer than the near side, no matter where I stand! It's like an image in a concave mirror, which is *in front of* the mirror, instead of *behind* it as in the case of an ordinary flat mirror."

"I'm glad that you remember something from your course in Physical Optics." Tyrrell beamed disarmingly. "And you *have* hit upon one of the basic secrets of my machine. It *is* distorted; but the distortion exists in the time direction, rather than in space. The principle which I have employed involves mathematics higher than any which you have yet had, but which you can some day master, if you follow my advice. I can summarize it by saying that I have discovered how to slow down the universal increase of entropy within the bounds of that machine—also how to make time tangible by multiplying the fourth dimension by the square root of minus one."

Worthey faced the old Professor, put his hands on his hips, and cocked his head on one side. "Now you're beginning to make sense," he asserted ruminatively. "I remember you sounding off in class about Eddington's theory that entropy is what makes time one-directional; so that, when eventually the entropy in the universe reaches its maximum, the universe will have run down, and there won't be any such thing as time any more. Also that the only thing about time that is any different from space is the square root of minus one."

The Professor's pale blue eyes widened. "I'm amazed to see you agreeing so readily," he murmured. "Well, now do you believe in my time machine?"

"I'd like to see the darn thing run," Worthey challenged.

BUT Professor Tyrrell shook his white head. "I don't like to use up available stopping points," he explained. "Remember the rule? A time, once visited, can never be revisited."

"That suggests another snag," said Worthey. "What happens if your contraption lands you in a *space* where there is already something else?"

Tyrrell smiled. "Again we are saved by the handy rule against unsportsman-like conduct on the part of Nature. I tested that situation too with my little model, before I dared try traveling in the large machine myself. For some unknown reason, whenever the machine arrives in space already occupied, it will side-step the obstruction. Come, I'll show you. It'll be worth using up one more stopping point, to demonstrate this characteristic."

He crawled through the shimmering distorted maze, sat down on the tractor seat, took a short control-lever from his jacket pocket, and fitted it to a boss on the instrument-panel in front of him. "I'll go back a hundred years, and then return to about half an hour later than my starting time. Meanwhile after I leave you push that large packing box into the space where the machine now rests, and which will shortly be empty. Then stand back in the doorway and watch. All set?"

Dubiously, George Worthey nodded. What was the old fool going to do? The Professor smiled at him through the glass walls, notched the controller—and the time machine began to shimmer and fade away. In half a minute—an interminable half minute—it was gone, completely gone. Worthey didn't know what to make of it. Had the Professor really gone on a jaunt through time? There could be no other answer.

Maybe he had just made himself invisible? But no—he passed a hand through the space where the time machine had stood, and it was empty. Oh yes—the packing case. Worthey could just see Old Tillie returning to the same space, smacking into the case and dying pierced by several hundred riven splinters. But he pushed the case into position and waited. So Old Tillie really knew something. . . .

A half hour later, to the dot, the time-machine, with the smiling Professor Tyrrell seated at the controls, materialized out of nothingness just barely to one side of the wooden box.

"There, you see!" the Professor said calmly, getting down off the seat, and crawling out from the maze of glass-enclosed silver and crystal and coiled wire. "And now would *you* like to take a trip?"

Worthey nodded, but he was terrified at the prospect. Terrified—of what? he asked himself. Of something this ancient fossilized Professor had dared to do? Time travel, hell!

Yet he temporized. "Just why did you pick me, instead of one of the faculty?" he murmured.

"How quiet you are, George," said Tyrrell. "I'll tell you why. For two reasons. First, you are unlikely to try to steal either my ideas or the credit for them. You are a sportsman, and so wouldn't steal if you could. You are not yet a graduate physicist, and so couldn't steal if you would. Second, it will take a man of courage to penetrate very far into the future. And from the way you behave in class, I know you have courage. I went forward a thousand years once." He shuddered. "It was most unpleasant. Well, get into the seat and I'll show you how it works."

Worthey eased his long lanky body gingerly through the shimmering maze, and hoisted himself into the seat. On the instrument board before him was merely the single controller-handle, set at neutral, with notches extending to each side; and a series of dials marked *"HOURS," "DAYS," "YEARS," "HUNDREDS," "TEN THOUSANDS," "MILLIONS."*

Tyrrell explained: "To the right is forward in time. To the left, return. Set all the dials to zero." Worthey set the pointers. The Professor continued, "Go forward at least two thousand years, so as not to conflict with any of *my* trips. Take careful note of how far you go. And return *tomorrow*—understand—so that the *DAY* dial registers 1. Not a bit earlier, for I'd hate to lose my time machine because some smart aleck had the temerity to violate a fundamental law of time-traveling, just to prove that he knew more physics than I."

"And I'd hate to lose my life, Professor,"

Worthey grinned. He was taking heart already. It was simple, after all. "No danger. Well, here goes!" He shifted the handle one notch to the right.

The time-machine began to throb. A dizzy sensation, as of falling, engulfed him. He gulped, shook himself, and closed his eyes.

WHEN he steadied and opened his eyes again, all was dark. But, a minute later, dim daylight filtered in through the cellar windows. Then broad day. The *HOURS* dial read 10.

He shoved the controller another notch. The *HOURS* pointer spun. It was dark again.

Another notch. Daylight and dark succeeded each other in rhythmic cadence like the ticking of a watch.

Another notch. A blurred buzzing gray twilight. Exhilaration seized him. Why not go clear on to the end of the world, and see what was waiting in store for man? For he suddenly recalled a sonnet in divided rhyme, in which someone had paraphrased Wells' description of the furthest point in the future to which the time-traveler went in his story.

George Worthey decided to view that scene for himself. And it wasn't a bad idea to check up on Wells, either. So he slammed the controller way over. His senses reeled, and he pitched forward against the control panel.

When his brain finally cleared, all the pointers were spinning except the *MILLIONS*, and that one was moving steadily forward: one million, two million, three million. Worthey was out in the open now, in a pale world, illumined by a golden band of light which stretched across the sky from east to west, and which pulsed rapidly northward and southward as the years fled past.

Gradually this band of light widened and reddened and became less luminous. It ceased to pulse. It concentrated on the eastern horizon, and became a huge red ball, hanging there motionless.

Then it was that Worthey slowly notched back his controller, and came to a halt in time.

More than two hundred million years had passed, and the world as he had known it was dead and gone. The time-machine stood on a rocky spit of land, jutting out into a listless sea. Not a living thing, not a plant not even a lichen, did the rocks contain. The slimy edge of the sea crawled maggot-like. A hollow soundlessness hung over the world. An unutterable chill and gloom pervaded everything. George Worthey shuddered, but more from the ominous feel of things than from the actual temperature, cold though it was.

Dark indistinct clouds gathered, ruddy on one side like the smoke of a train when the fireman opens the firedoor to shovel in coal. Snow began to fall.

He had seen enough. He did not even care to set foot on this barren land of things to be. Shuddering once more, he notched the controller to the leftward, and the catapulting return through time began.

At last he shook himself together. Why should he, or any other man, worry about the dim distant future, millions of years after the human race would have become extinct? He himself especially, in the midst of a pleasant life? And with the fraternity dance that night.

Ye gods—the dance! That night. He would miss it completely if he literally heeded Old Tillie's admonition to return to the present world one whole day later than his departure. Why not just a few hours later? Who did Old Tillie think he was? In fact, why not just a few *minutes* later? Then he could get a good night's sleep. He felt very tired—in need of a full night's rest. Almost was he tempted to return that afternoon, rather than evening, so that he could get plenty of sleep. How tired he was! His head began to nod.

With a start he pulled himself together and glanced at the dials. The *MILLIONS* pointer was just slipping under 1. Hastily he notched back the controller. Less than ten thousand years now. Less than a hundred years. Less than a year.

Fascinated, he watched the days of the current year reel backwards. Less than a day now. The controller handle was at its lowest notch, as the hours slowly reversed. Already he had disobeyed Professor Tyrrell; he must watch out and not overdo it. He must stop before all the dials read zero, or poof! Annihilation!

PANIC stricken at the thought, Worthey slammed the handle forward just past neutral for a moment, so as to use his motor as a brake. The *HOURS* dial slowed.

Reassured by the certainty that he would stop definitely later than his starting time, Worthey felt new annoyance about the dance. Suddenly he was entertaining the impish idea of traveling on exactly to his starting time. He would show up Old Tillie, he would; he'd make a laughing stock of him. What possible harm could come of returning exactly to his starting point? What did the old boy know, after all?

With sudden resolution, George Worthey notched the controller backward again for an instant, and then to neutral just as all the dials read exactly zero.

From somewhere he could hear—

Professor Tyrrell speaking: "I'd hate to lose my time-machine because some smart aleck had the temerity to violate a fundamental law of time-traveling, just to prove that he knew more physics than I."

"And I'd hate to lose my life, Professor."

"No danger. Well, here goes." He shifted the handle one notch to the right.

The time-machine began to throb. A dizzy sensation, as of falling, engulfed him. He gulped, shook himself, and closed his eyes.

When he steadied and opened them again, all was dark. But, a minute later, dim daylight filtered in through the cellar windows. Then broad day. The HOURS pointer spun. It was dark again.

Another notch. Daylight and dark succeeded each other in rhythmic cadence like the ticking of a watch. Another notch. A blurred buzzing gray twilight. Exhilaration seized him. Why not go clear on to the end of the world, and see what God had in store for man?

And so we find Sherwin traveling forward in time again, exactly as before. Again? No. For this was not a mere *repetition* of his former trip. This was the former trip itself. The identically same time-within-a-time. For, by going back to a point where he had been before, Sherwin had become caught in a time-eddy, in which he would relive over and over again, for all eternity, that brief time-trip of two hundred million years; and yet without knowing that he was reliving it.

But to sweet patient old Professor Tyrrell, standing beyond the edges of that time eddy, it seemed that his time-machine and its headstrong passenger had ceased to exist.

And who knows but what he was right! It is all a mere matter of definition of terms. It demonstrates a fundamental principle of time-traveling. And it demonstrates still further that a smart-aleck student can goad a sweet patient old Professor just so far.

●

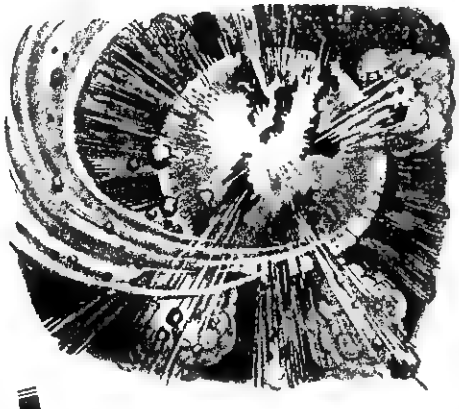
Watch for the contest winners next month! Entries were extremely heavy, and the editors are pleased with the results. And believe us, it's going to be a tough job to select the winners. Many hundreds of our readers are extremely clever fellows—extremely clever!

RIDDLES OF SCIENCE

Mystery of the Asteroids

IN 1772, **JOHANN ELERT BODE**, GERMAN ASTRONOMER, POSTULATED A **NEW** LAW WHICH INDICATED A— **"MISSING"** PLANET LOCATED BETWEEN MARS *and* JUPITER.

FOLLOWING BODE'S LAW, **PIAZZI** DISCOVERED THE MINOR PLANET, **CERES**, ON JAN. 1, 1801. **PALLAS, JUNO,** *and* **VESTA** WERE DISCOVERED SEVERAL YEARS LATER. OVER 1000 SMALLER ASTEROIDS ARE NOW CATALOGUED . .

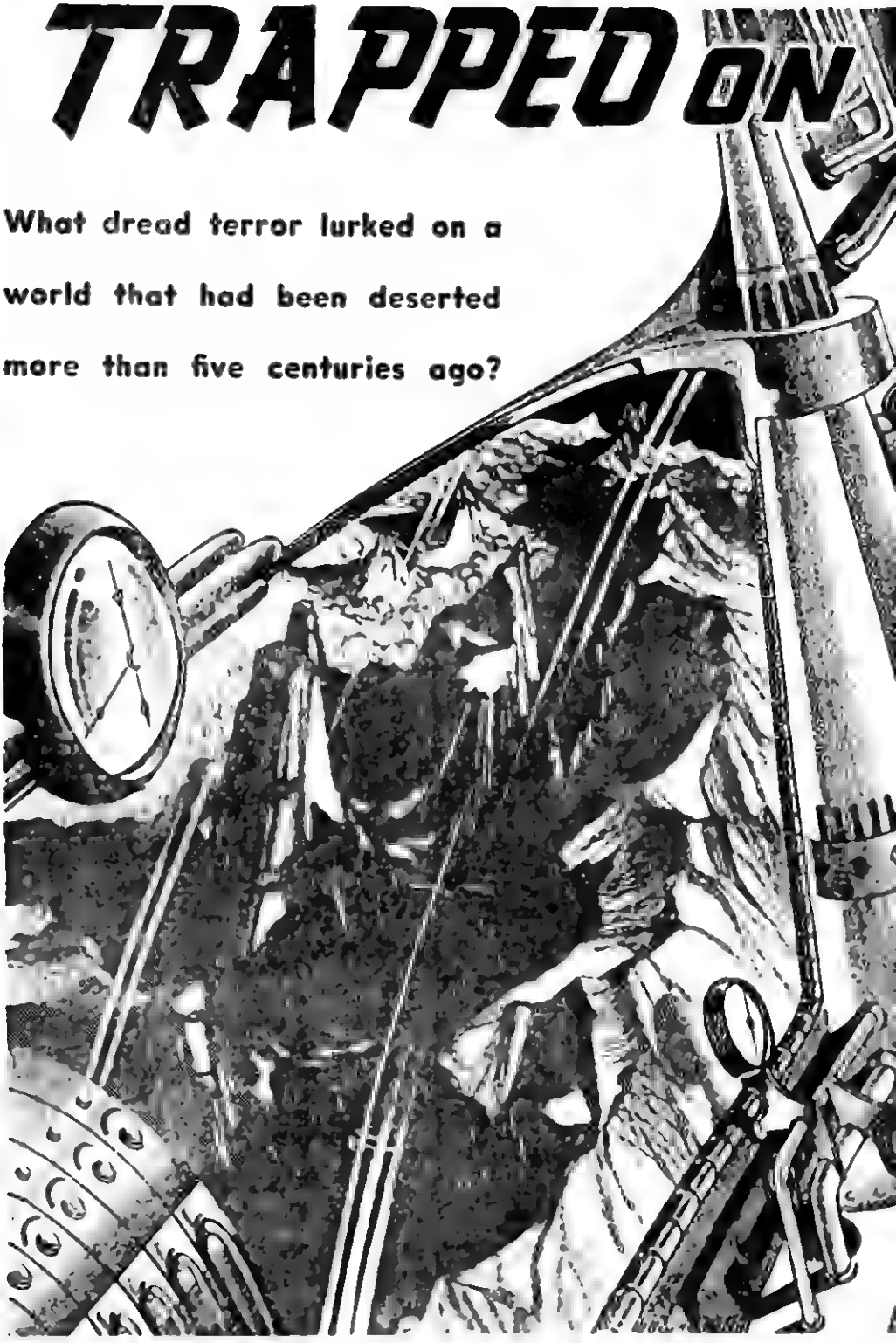


ARE THE **ASTEROIDS** THE DEBRIS OF AN ANCIENT PLANET WHICH MET WITH DISASTER? ARE THEY INTRUDERS FROM OUTER SPACE, PERHAPS A CAPTURED COMET? WHAT IS THE **TRUE STORY** OF THE **ASTEROID BELT**?

THE implications of the asteroid belt are many. Perhaps a giant world once revolved there, as large or larger than Earth, and supported living beings. Perhaps their own science caused a great disaster that destroyed the planet. Perhaps it was a young planet, still incandescent, that blew up in a titanic atomic explosion. Perhaps it was a comet that was trapped by the sun's gravitation. Does it forecast the fate of still others of the sun's children? Is it a forecast of Earth's future? Science would like to know.

TRAPPED ON

What dread terror lurked on a world that had been deserted more than five centuries ago?



With widening speed the lens dropped toward the jagged world

by

DAVID WRIGHT O'BRIEN

"HELLO . . . Hello, Earth . . . Hello . . . Calling wave nine, Space Ship Corporation . . . Wave nine . . . Calling Space Ship Corporation. Standing by for radiophone from Space Ship Corporation . . . Wave nine . . . Come in, Earth."

Chet Chadwick pushed a lank strand of black hair from his forehead and snapped on the radiophone receptor button beside his seat in the control room of the gigantic space liner. For a moment he shifted his lanky frame to face his co-pilot, chubby Monk Sands.

"Wonder what in hell they want?"

Sands' round pleasant features were noncommittal, and he shrugged his wide plump shoulders in bewilderment. "Dunno. Mebbe the Chief wants to

check on us, huh?"

In the next instant the radiophone receptor crackled faintly, and after a blurred vibration hum a voice flooded into the control room. At the sound of the first several words, both pilots sat bolt upright. The voice was low, sweet, and feminine.

"Hello, Chet," said the feminine voice. "How are you darling? And how is dear Monk?"

Chet Chadwick sucked in his breath sharply, ignoring the sharp glance that Monk Sands suddenly turned on him. The voice went on.

"I'll bet you two big Test Pilots are surprised to hear from me, darlings," the voice cooed. "But I just couldn't wait three more days until you returned to Earth, Chet—and you too, Monk. I just couldn't wait to see you both, so I asked your boss to let me talk to you from the company control rooms.

"Just in case you haven't guessed who this is, Chet—and Monk, I won't make you worry. It's Olga, darlings. Do hurry back from your nasty test trials in that nasty old space liner, Chet darling. And you, too, Monk. See you in three days, dears."

Crackling came back to the radiophone receptor, the hum grew once more, and the light above the board indicated that the conversation was concluded. Chet Chadwick leaned over and snapped off the button, still keeping his eyes averted from those of his co-pilot.

"So!" Monk Sands' voice broke the ominous silence. "So!"

"Now, Monk," Chadwick began, repressing a smile.

"Don't now-Monk me," his companion bellowed as his usually bland face took on a slow tinge of purple. "So it's *Chet* and Monk, eh? Since when have you been beating my time with Olga, you louse?"

Chadwick struggled to assume an air of injured innocence. He raised his hands from the controls of the space liner in an expressive gesture. "Monk," his voice was reproachful, "do you think I'd double-cross a pal?"

The rotund little Test Pilot's voice shook with rage and sarcasm as he replied. "Oh no, you skunk, you'd *never* double-cross a pal. You've never kept your paws off my women in all the time I've had the misfortune to know you. There was Winnie in Singapore, Carol on Venus, Marge on Ceres, Helen on Jupiter—," his voice broke off disgustedly. Then: "So many more that I can't remember them all. And now, damn your long hide, I find out you've been trying to make a name for yourself with Olga!"

Chadwick kept his face straight, but his gray eyes twinkled as he spoke. "Now Monk, you know that there isn't anything between Olga and I. The only reason she pays any attention to me is because I'm your buddy. It's purely platonic, I swear!"

"Platonic! Yah, just like Romeo and Juliet were platonic!"

"Now Monk. This isn't any time for a misunderstanding. We can't argue about women. We've got to put this baby into a power drop in another moment. Hell, if we don't finish these tests, we'll never get this liner back to Earth in three days."

"You're changing the subject," Sands said suspiciously.

"We can talk it over when we get our tests done," Chadwick replied. Then, as if the matter were closed until future notice, he began to check his instrument panel. Sands watched him wordlessly, seething in rage and indignation.

"Check the percussion panel," Chadwick instructed his infuriated companion. Sands, muttering sullenly to himself, began to make a systematic

check of the gauges before him. After a moment he looked up. "All set!"

Chadwick finished his own readings, nodding as he lifted his head. "Good enough, dearie. Hang on tight. We're going to give this ship plenty of hell in a minute."

CUTTING the rockets to half-percussion drive, Chadwick gave the huge space liner its head, and in the space of several swift seconds the nose of the ship dropped with sickening suddenness. At that moment, as the enormous experimental liner slid into a power drop through space, Chadwick spoke one taunting sentence to his co-pilot.

"Olga's a good kid," he said, "but I never could stand her lipstick!" Then he threw open the percussion throttle, driving the liner into a steep dive.

As the rockets banged to an explosive crescendo, so did Monk Sands.

His mouth fell open and his hands, letting free of the dual controls, worked convulsively. He was literally sputtering with outraged indignation. Chet Chadwick had only time to shout, "Dammit, you goof, get your paws back on those controls!"

But even as the words left Chadwick's mouth, he knew it was too late. The pull of the dive on the controls was too much for one pilot to guide. He felt the force of the recoil tear them from his hands. Even above the noise of the rockets, both pilots heard the sound of the magnetic direction gear snapping, whipping off into space, leaving the liner rudderless.

Instantly Chadwick cut off the percussion throttle and, with the aid of his co-pilot, pulled the nose of the gigantic liner to an even keel once more. Out of control, the liner was drifting listlessly in space.

"Now you've done it!" Chadwick's voice was a bark.

"Me?" Sands' tone was almost squeaky in its rising ire. "Me?"

"Who in hell but you?" Chadwick demanded. "Couldn't even keep your paws on the controls long enough to complete a test. I oughta—" he broke off significantly.

Sands was on his feet instantly, fists balled, advancing toward his co-pilot. "Go ahead. Finish your sentence. You oughta what?"

Chadwick uncoiled his lanky frame from his seat and faced Sands.

"Oughta bust you on the button!" Chadwick said.

"Why, you elongated, woman-stealing skunk! Just try it, that's all I'd like. Just try it!"

Suddenly Chadwick relaxed. "This is a fine howdoyuhdo. Here we are fighting over a woman while we drift about in a crippled ship!"

Sands, frowning, turned and walked to the porthole at the left of the control room. "Cripes," he said looking out at the blackness surrounding the liner. "I'd forgotten. What in hell are we gonna do?"

"We'll have to make repairs. That much is certain. We can't maneuver this baby back to Earth without a magnetic direction gear. It's also certain that we can't fix it while we're dangling here in space," Chadwick answered.

"Mebbe we ought to find out where we are?" Sands decided.

"Check on the radio compass," his companion instructed. "We're only a day out of Saturn's range. We must be somewhere above one of her moons."

Monk Sands grunted reply as he bent above the compass chart. His curly blond head moved up and down several times as he took "shootings" of their position. At last he raised his head and faced Chadwick.

"We're lucky," he said tersely, "and

then again we're not."

"What do you mean?"

"Since we can only move up or down, it's a damned lucky thing that we're over a planet. But since that planet happened to be one of the zoned areas, we're not so lucky."

Chadwick whistled. The "zoned areas" were those planets marked off by Earth Council as uninhabitable and worthless for any one of a number of reasons. They lay outside the interplanetary transportation lanes and were never troubled by interplanetary contact. It was a cinch that it would be next to impossible to make any repairs on a zoned planet.

"What's the name of this blob in the cosmos that we're hanging over?" Chadwick asked.

"Titan," Sands replied. Then he picked up an interplanetary pilot guide, thumbing through it. "To give it the way the book does," he announced. "Titan zoned area, one of the satellites of Saturn. Climatically uninhabitable, this world was deserted in 2821 when its radium deposits were exhausted." The chubby pilot closed the book and looked at his companion.

"Hell," Chadwick replied sourly. "Titan hasn't seen a human being in five hundred years. How the devil are we ever going to make our repairs in a place like that?"

"We can't be choosy," Sands replied. "So down we go."

Chadwick took his place before the controls once more. As he did so, he spoke. "Mebbe we'd better notify Earth and have them send someone out to pick us up."

Monk Sands looked at him quizzically. "And have those boobs back at the plant find out what happened?" There was reproach in his voice.

"Yeah," Chadwick agreed. "I didn't think of that. I guess we'd better not. We can make the repairs ourselves." He paused, as though searching for a reason stronger than mere pride. "Besides," he added. "It would take them damn near three days to get here."

As the pair concentrated their silent attention on getting the huge space liner safely down to the planet that lay somewhere below them, both were thinking one thing, the team of Chadwick and Sands had a long reputation to live up to— and they'd be damned if they'd fold up on this job . . .

TWELVE almost wordless hours later—during which time there had been no mention of Olgas in particular and women in general—Chet Chadwick looked up from his control panel. "There she is," he said briefly. "Titan!"

Monk Sands was silent as he looked down at the rapidly approaching satellite, but he nodded his head in reply.

Twenty minutes later, both pilots watched the rough terrain rushing up at them, and braced themselves for the necessarily bumpy landing that was to come. Handling the controls was delicate for some moments, but five minutes later Chet Chadwick rose from his seat and stepped to the side portholes of the space liner.

The huge craft had been eased down in the middle of what seemed to be a vast pampas, broken only by jutting crags of lunar rock formation. To every side seemed to stretch waste and desolation.

"No wonder they abandoned the place, once the radium sources had been sapped," Sands remarked.

Silently, then, the pair walked over to the lockers in the compartment behind the control room. There they began to laboriously clothe themselves in space suits. They were dressed and standing before the compression door when Chadwick signalled Sands to tune

in his receptor box for conversation.

"One of us better wait inside here, while the other takes a look around," Chadwick said from inside his glass helmet.

Sands nodded, stepping toward the door, but Chadwick's tall form blocked his way. "You wait. I'll go outside," he commanded. Sands shrugged and watched his companion press the compression door release and disappear out onto the plains of Titan. Then he walked over to the control panels and sat down to wait Chadwick's return.

Twenty minutes later, Monk Sands was growing impatient. Sweat was rolling down his face from the heat of the cabin and he rose to peer out of the porthole in an effort to see Chadwick. But the other was not in sight.

Ten minutes more passed, and Monk Sands was feeling a bit of worry as well as impatience. He rose, cursing, and walked over to the compression door, pressing the release button. An instant later he stepped out onto the rocky terrain.

ABOUT him stretched the same dull gray reaches of crags and pampas that he had glimpsed from inside the ship. But as he looked to left and right, he was still unable to catch sight of Chadwick. He looked back at the long, bullet-like hulk of the space liner. Perhaps Chet was over on the other side. Laboriously, Sands began to trudge around the nose of the ship. He had rounded the front and was able to glimpse the territory on the other side of the large liner when he gasped in astonishment, stopping dead in his tracks. At the tail of the liner, coming toward him, was Chadwick's lanky form. But that wasn't what made Monk Sands gape unbelievingly. Chet was walking beside another space clad figure—and through the glass helmet of the other's suit, Monk recognized the features of an astonishingly pretty young woman!

"Well I'll be a blank-blink-blank," Monk muttered. "That roving Casanova can find a woman even on an uninhabited planet!" Then his eyes widened in appreciation. "And what a looker! How in hell did that doll ever get on this godforsaken spot?"

Sands had forgotten that Chet was now within range of his receptor-transmitter apparatus, and was startled to hear his fellow pilot's reply. "What do you think of this baby?" Chadwick's excited voice came to him.

Chadwick and the strange girl were within ten yards of Sands, now. "Where did you find her?" the chubby co-pilot asked.

"Lord knows," Chadwick replied. "She came out from behind one of those crags after I left the ship." He pointed to the garb of the girl. "What do you think of that space suit?"

Sands frowned. He hadn't noticed it until now, but the girl was wearing a space suit that had been outmoded for centuries. No wonder the girl was silent. She didn't even have communication gear.

Then the two men and the girl were together, and Monk took a swift appraisal of the strange young lady. His first guess, as to her prettiness, had been wrong. She wasn't pretty. She was beautiful, excruciatingly beautiful!

Red half-parted lips above a delicately moulded chin, tilted nose, level gray eyes, and a tumbled halo of lustrous raven hair gave ample testimony that the body within the cumbersome space suit was also lovely.

For fully a minute, Monk gaped stupidly at the incredible beauty of the girl, then he turned to Chadwick.

"What, that is, how—I thought—"

"That Titan was u n i n h a b i t e d,"

Chadwick finished for him. "Yeah, so did I. But this cutie here seems to disprove it."

The girl was watching both Sands and Chadwick closely, as if in an effort to follow their conversation by the movements of their lips. Then Chadwick had a possessive arm around her waist and began to move toward the nose of the space liner. Sands was at the side of his co-pilot and the girl instantly.

"What's the pitch, Chet?" the rotund little pilot asked.

"Want to get her inside the cabin of the ship," Chadwick explained. "Then she can remove her space helmet and we can communicate with her."

"If," Sands interposed, "she speaks a language we can understand."

"That won't make a great deal of difference," Chadwick answered, and Sands saw him grin beneath his glass helmet.

"Oh," the little pilot put a fine edge of sarcasm into his tone, "so it's going to be Chet Chadwick, Interplanetary Romeo all over again, eh?"

"Stick to Olga," his companion snapped. "You were all hot and hiccuppy about her a little while ago."

THE trio was just rounding the nose of the ship when it happened.

Sands heard Chadwick curse in wild surprise, and at the same instant felt a whip-like tentacle wrap around his waist, lifting him high into the air. He threshed his arms wildly about in a desperate effort to free himself.

The tentacle tightened, yet held him gently. Sands stopped kicking and turned his head—to meet the wild stare of Chadwick who was held in exactly the same position by another tentacle.

Then his eyes met the vapid gaze of two flat, enormously large eyes, peering out from the round blue skull of an incredible monster!

Sands tried to shout, and suddenly realized the uselessness of such an action. He heard Chadwick spluttering helplessly from his dangling perch in the other tentacle of the creature. Something prompted him to look down at the ground, and to his amazement he saw the girl, unmolested and unperturbed, staring calmly at the scene!

Then, gently, Sands felt the tentacle lowering him to the ground once more, saw Chadwick also being deposited back on his feet. Both of them wheeled instantly, the moment they felt their feet touching ground, and faced the towering creature.

"Leaping meteorites!" Sands blurted. "And we thought Titan was uninhabited. What sort of a thing is this?"

"Not a very lovely looking specimen, whatever he is," Chadwick said hoarsely. "Where did he come from so fast?" I didn't see him around when I ran into the girl."

At mention of the girl, Sands wheeled to face her. Her face still wore the same look of solemn appraisal.

Bewilderedly, he turned again to face the tentacled monster. The creature, Sands could see more clearly now, was fully thirteen feet tall, with grotesque, spindly legs that accounted for three-fourths of its incredible height. Its thin torso was wasp-waisted, and of a mottled blue-green coloring. The tentacles, he saw, emerged from elbows on either arm, and were purple colored and the length of a man's body. Each arm, if they could be called arms, possessed two of these tentacles.

Instinctively, Monk Sands and Chet Chadwick moved closer together, as though their nearness might ward off any further designs of the towering monster. Sweat was rolling profusely down Monk's round face, and looking

at Chadwick he saw that the other was swallowing slowly.

Then the girl stepped before them, placing her hands on the arm of each, moving them forward toward the Titanian. Chadwick and Sands tore free from her grasp at the same moment.

"Lovely girl friends, you pick," Sands grated, "she wants to feed us to her pet."

Suddenly the huge monster bent slightly, and in a swift motion threw his tentacles around the pair once more. The girl was gazing at them solemnly still, but was pointing toward a crag of lunar formation in the distance.

"She likes our company," Chadwick said unsmilingly, "and seems to think that we'd better go in that direction if we know what's good for little boys."

Sands looked swiftly upward again, met the flat emotionless eyes of the Titanian. "I think we'd better get moving, then. Before Oscar, here, gets any more ideas."

Then, with the girl leading the way, and the Titanian bringing up the rear, the strange procession began to move off across the rocky terrain.

They were within a hundred yards of the lunar rock formation that the girl had indicated when she turned, beckoning them to move ahead of her. Sands wasn't certain, but he thought, as they drew closer to the gigantic crag, that he could see a stirring behind it.

"There seems to be something moving around behind that knoll," he said to Chadwick.

"Probably pixies," his companion replied sardonically.

A split-second later, Monk's suspicions were confirmed, for moving with awkward swiftness, three Titanians, identical to their captor in the rear, stepped forth from behind the crag and advanced toward them!

"A welcoming committee from the Chamber of Commerce," Monk heard Chadwick mutter, without a trace of humor in his voice. And as his companion spoke, Sands realized that the lanky pilot was just as apprehensive as himself, but was trying to keep his own and Monk's courage alive.

The Titanians were on them in the next moment, forming a sort of guard around the pair as they approached the huge crag. "Mebbe," Sands said hoarsely, "we can make a break for it?"

Chadwick's voice was sharp, but calming. "Take it easy, Monk. There's nothing we can do until we get the wind of this thing."

As they rounded the crag the little party stopped abruptly, Sands and Chadwick gasping in astonishment at the same moment. The crag was nothing more than a hollowed shaft, stone on one side, and structural chrome on the other. It was the worked-out pit of a very old radium mine.

FOR a moment the grotesque Titanians milled about uncertainly. The two earthmen took advantage of this to survey their surroundings. The shaft was bored into the rock formation of the crag on a steadily declining angle, but the most astonishing feature of it was its proportions. One of the Titanians happened to be standing at the entrance to the pit, and comparative measurements showed that it was wide and high enough to enable the creature to move about comfortably at its mouth.

"These are the ancient radium mines of 2000," Chadwick almost whispered, "but they've been enlarged all out of proportion to fit the bodies of these tower creatures."

"But—," Sands words were cut off sharply, for in that instant he felt the tentacles of one of the Titanians wrap about his waist, saw another seize Chadwick—and then the two earthmen were

carried bodily down the steep incline, into the darkness of the shaft!

Everything was blackness in another moment. "Chet," Sands heard himself shouting, "are you all right?" He could still hear the heavy breathing of his companion coming through his receptor.

"Yeah, fella. I'm okay," Chadwick's reply was reassuring. "How about you? What kind of a ride are you getting?"

Under any other circumstances the chubby little pilot would have laughed aloud at the bland unconcern in his lanky pal's voice. As it was, however, he gained relief and a sense of strengthened courage from the other's reply.

"I'm still in circulation," he said, trying to keep his voice as unconcerned as Chadwick's. Then further conversation became impossible as the journey grew rougher. It seemed as though every step taken by the Titanian who held him was getting more and more awkward. Evidently the footing on the shaft was becoming increasingly difficult.

The tentacles still held him with firm but unyielding gentleness, but as the creature lurched awkwardly along through the darkness, the rocking motion smashed Monk's head against the thick glass of his space helmet several times.

He could hear a muttered curse from Chadwick, and guessed that the other was finding the same difficulty. Then another jarring step sent his head smashing into the side of the helmet for the third time. It was a harder blow than any of the others, and left him dizzy, sick, nauseated. Blood trickled from the corner of his mouth and he licked it back with his tongue.

There wasn't the faintest glimmer of light anywhere in the shaft, and Sands wondered about the large circular eyes of the monsters, wondered if perhaps they could see in the blackness of the old mine.

Suddenly, out of his receptor apparatus, he heard the sound of a sharp cry from Chadwick, followed by a noise like a long sigh.

"Chet," Monk shouted quickly. "Chet, are you okay?"

There was no answer, merely the faint sound of subdued breathing. "Chet," Sands shouted again. "What's happened? Can't you hear me?"

Monk Sand's head smashed against the glass plate of his helmet for the fourth time. . . .

"MONK," a voice was crying, "Monk! Snap out of it!"

Sands opened his eyes slowly, shut them again for an instant to accustom himself to the blinding glare of his surroundings. He moved his hand to shield his eyes and became aware that he was no longer clad in his space suit.

Monk opened his eyes once more to become fully cognizant of his surroundings for the first time.

Chadwick was bending over him, had been the one who shook him into consciousness. He noticed that Chet, too, was no longer wearing space gear.

A second glance told him that he was lying on damp stone in the center of an incredibly large cavern of some sort. The ceiling of the place, far above them, was marked by jagged icicle-like formations of rock that hung pendant-fashion downward.

The cavern itself was almost a mile in circumference, entirely clear of any obstructions. At one end of it, much to Monk's astonishment, was a long elevated rock platform on which were assembled some fifty human beings, laboriously swinging large sledge hammers on a huge sheet of metal that moved along before them!

Chadwick noticed Sand's expression.

"Yeah, Monk," he said softly, "it's not a dream. Those are earthmen. Don't ask me how they got here!" Chadwick pointed his finger at the opposite end of the cavern. "Those human beings are slaves to the Titanians!"

Monk saw some twenty of the grotesque, tentacled creatures moving about a raised dais at the other end of the enormous natural room. On the dais, squatting ludicrously and buddha-like on an elevated throne, was another of the Titanians—his feelers holding a sort of double-knobbed sceptre!

"The King, or Boss, or High-Mucky-Muck, ruler of this joint!" Chadwick said.

And then, while his rotund companion listened with growing incredulity, Chet Chadwick related the events that occurred after he regained consciousness. He had, Chadwick said, been jolted into insensibility when his head smashed into the side of the turret-like space helmet. That was just before Monk received a similar blow and was knocked out. Later, Chadwick woke in in the cavern, beside Sands. The girl that they had first encountered was standing above him, no longer dressed in the cumbersome and antiquated space suit in which they had first seen her.

"My Lord, Monk," Chet went on explosively, "you've never seen such a woman! Glorious!"

"She was a knockout, even in the space suit," Sands observed dryly.

Chadwick resumed his narration. The girl had been able to speak English, had told him that she and the other earth people in the cave were enslaved by the spindle-legged Titanians.

"But where are they from, the girl and the earth people?" Sands demanded excitedly. "Why did they come to Titan when they know it's been sectored off by Earth Council for the last five centuries?"

"Don't know," Chadwick replied. "She didn't get a chance to tell me that. They—the Titanians took her off before she had a chance to explain. She did say, however, that she was forced to remain calm, placid, when we were seized by the strange creatures."

"Yah," said Sands accusingly, "I was coming to that. Why did she seem to act like she was watching nothing at all when Oscar sneaked upon us?"

"She says she had to; that we'd have been snuffed out if we'd been warned and tried to resist!"

Sands' cherubic features wrinkled in perplexity. "What does it all add up to? Where'd they take the girl."

"I didn't see that," Chadwick continued, " because one of them stalked over to me, whipped me up in his tentacles and carried me over to the Big Shot—the lad over there on the dais, with the sceptre in his hand." Chadwick paused for breath, wiping perspiration from his stubbled jaw.

"Get on with it," Sands snapped impatiently.

"Well, the Big-Shot held that damned sceptre over me—I was still dangling in the air, held by those tentacles—and moved it back and forth across my head. I couldn't get a good glance at it, for I'd slipped my helmet back on after they'd taken the girl away, but it seemed to be a phosphorous sort of wand, made out of some blue metal.

"The thing crackled with electrical vibrations, and I felt the damndest buzzing sensation in my head. Then, after about two minutes of this, the Big-Shot seemed satisfied, and ordered me to be taken back. I watched while they did the same thing to you. You were still unconscious at the time. Then they brought you back."

"Which—?" said Monk.

"—Brings us up to date. They took

our space suits away and I brought you around less than five minutes after that happened." Chadwick concluded.

"It sounds like something out of a twentieth century nursery rhyme," said Sands. "Now what are we going to do about it?"

CHADWICK turned his lean profile toward the other end of the huge cavern. His eyes narrowed as he gazed at the rock formation on which the earthmen were working ceaselessly with their great sledges. It was difficult, from where the two pilots were, to make out anything but general appearances of the toiling earthmen. The distance was too great for facial characteristics to be visible.

"Did the girl tell you how many earthmen the Titanians had in captivity?" Sands asked, noticing the object of his pal's attention.

"I'm not sure, but I think that those lads swinging the hammers up there, and the girl herself, are the only people of our race, besides ourselves, on this miserable planet."

Suddenly Chadwick's face tensed. He grabbed his co-pilot by the arm. "Listen, it just occurred to me. One girl and close to fifty men! Doesn't that sound odd?"

Monk frowned. "You don't *know* that she's the only earth woman held captive here."

Chadwick became impatient. "Do you think those people up there, swinging those big hammers, are women?" he replied sarcastically.

Monk whistled. "Mebbe you're right. It does seem *damned* odd!"

"And another thing," Chadwick was continuing with tense excitement, "I'm trying to remember a remark she made just before the Titanians took her away." He paused, knitting his brows in fierce concentration. "I was still groggy for the better part of the few moments speech I had with her. But I think—mind you I'm not sure—she made some remark about brains. Something about watching the 'sapper'!"

" 'Sapper'," Monk replied, "What in the name of everything unholy is a 'sapper'?"

Chadwick never had a chance to reply, for at that moment, apparently at a command from the grotesque Titanian on the dais, two of the spindle-legged creatures advanced stolidly across the cavern floor toward them.

"Here they come. Hang on to your hat!" Monk shouted, rising to his feet. Chadwick was instantly beside him, and the two watched the Titanians moving swiftly down on them.

"Take it easy, Monk," Chadwick said, hitching his belt in a gesture characteristic of the lanky test pilot when in trouble. "They haven't actually harmed us as yet, and maybe they don't intend to."

"Yah," Monk said from the side of his mouth, eyes fixed on the advancing monsters. "Yah, mebbe they don't. But I don't think that's love gleaming out of their popeyes!"

Then the nightmarish creatures were towering above them, their tentacle arms weaving back and forth, wide flat eyes expressionless.

"What I wouldn't do for a ray gun at this minute!" grated Sands.

"I told you to take it easy," Chadwick warned. "Any protection we could use is back in the spaceship. Don't forget it!"

The tentacles were whipping menacingly about the pair, as if in an effort to herd them in a certain direction.

The pair turned and began a rapid march across the damp stone floor of the cavern, drawing closer and closer to the sledge-swinging toilers. The Titanians kept an insistant pressure be-

hind them.

Fifty yards from the long stone platform on which the earthmen were toiling, Chadwick halted abruptly, grabbing his companion's arm.

"Monk!" His voice was hoarse. "Monk, for God's sake, look!"

Chadwick pointed at the group on the stone platform.

The bodily contours of the men on the platform were human, but their actual appearance was ape-like, hairy, almost aboriginal! They paused now in their labor. It was clear that they had seen the two new arrivals, for eyes gleamed sharply from beneath incredibly shaggy eyebrows, and thick lips drew back from fang-like teeth as they conversed among one another excitedly.

Their gibberish, which carried across the intervening distance to the horrified pair, was a weird combination of snarls and mangled English!

Bands of iron, linked by a long chain, were fastened around the necks and legs of each of the half-humans on the platform!

AT that moment the Titanians, evidently enraged at the delay, swept their whip-like arms around the two, and carried them the remaining distance.

Bedlam broke loose among the toilers as Sands and Chadwick sprawled on the stone ledge at their feet. For an instant the huge cavern was ominously silent. Then the ape-like men broke forth in a frenzied commotion of half-howls and shouts.

There was a sudden flurry at the other end of the vast cave. Eight or ten Titanians moved with incredible speed across the damp floor. In what seemed less than seconds, they were grouped along the platform, their tentacles lashing out on the backs of the shackled workers.

Gentleness was gone from the touch of those odd appendages. They flailed mercilessly down upon the unprotected hides of the slaves. A pungent acrid odor filled the air.

Monk and Chet were lying face downward on the ledge between the two groups—Titanians and half-humans.

"That smell!" Chet gasped. "It's burning flesh!"

Monk was staring in fascination at the spindle-legged monsters. "Their tentacles are red-hot whips," he said hoarsely. "Those damned monsters have some electrical force in their bodies. Look at the sparks flying from them!"

Chadwick, who had been giving his attention to the plight of the sledge slaves, turned his head for an instant to see their tormentors.

What Sands had shouted was true. Electrical sparks were literally flashing and crackling from the incredibly grotesque bodies of the Titanians!

Then, as suddenly as they had started the commotion, the shackled workers dropped to their knees, moaning piteously, their heads lowered under the cruel beatings.

Minutes later, the whip-like arms of the Titanians ceased. Methodically, then, the number who had come to the platform with the first outbreak moved back across the cavern to the dais of their leader on the opposite side. The two creatures who had herded Monk and Chet across the cavern still hovered over them, as if waiting a command.

It came.

The Titanians lifted Chet and Monk once more, and carried them to a passage that led off from the center of the cavern into a darkened alcove. Then down the passageway, finally pausing before an enormous metal door.

One of the spindle creatures pushed this inward, revealing a brightly lighted,

but small and stone-hewn prison cell. Chet and Monk were dropped to the floor of the place. The Titanians retreated, clanging the door shut behind them.

"I must say," Monk said bitterly when he and Chet were alone a few seconds later, "that we can't complain about not being taken on a tour of the joint. They've moved us around more than a pair of checkers."

Chadwick didn't reply. His brows were wrinkled in concentration, and his lips were a thin tight line across his face.

"Monk," he said after a moment. "Remember what I told you about the girl, about those slaves on the platform being her people?"

Sands climbed to his feet, scratching his head in confusion. "Damn! I almost forgot about that. Why," he paused, trying to phrase what he wanted to say, "those poor devils couldn't be of the same genus as her. It's impossible, Chet. Impossible!"

"That's just what I mean," Chadwick groaned desperately, placing his head wearily in his hands. "It's impossibly confusing. Aside from the small fact that we might not be alive in any succeeding minute, there's this snarled mystery to worry about."

"Let's worry about us, and the 'small matter' of our lives, first," Sands said dryly. "Then, if we have the time or inclination, we can look up anything we don't know about the joint in a nice encyclopedia!" He walked over to the tall metal door, and after gazing at it and rubbing his hand along its surface, kicked it experimentally with his foot.

"If we can figure this out," Chadwick said half to himself, "we might be able to find the key to get us out of this mess."

"It's all very logical," his companion agreed dryly, "but doesn't make a hell of a lot of sense!" Before turning back to Chadwick, Monk gave the door a parting kick. The kick was answered from the other side of the door!

The confinements of the small cell were deathly silent as Monk and Chadwick, heads cocked breathlessly to one side, listened for a repetition of the noise.

Seconds passed.

Then it came again, this time a little louder. The sound of a foot tapping twice on the metal door.

Both men looked questioningly at one another.

"It's a cinch it isn't our long legged buddies," Chadwick whispered.

"Yah," Monk replied with heavy sarcasm. "Go to the door and let 'em in, whoever it is."

Chadwick withered his plump little companion with a glance, then stepped swiftly over to the metal door. After listening with his ear to the metal sheeting, he rapped twice on it with his fist.

Two more raps answered.

"Earthmen?" The words were faint, coming from the other side of the door, and the pair opened their mouths to reply simultaneously.

Monk let Chet take over.

"Yes," the lanky pilot agreed. "Who is it?"

"It is the girl who met you above the ground, when you landed on Titan," came the soft reply.

Chadwick steadied his hammering pulses, saying, "Can you help us out of here?"

"There is a loose stone beside the door," the voice answered. "It is as high as a man's chin." Monk was already groping along the wall in search of the stone.

"She said a *man's* chin, runt!" Chadwick snorted, pushing him aside to search for the stone himself. In a mo-

ment he grunted in satisfaction, his fingers tugging at a loose stone the dimensions of a large baseball. Then it was in his hand, and while they gazed in popeyed astonishment, the door opened noiselessly!

The girl with the red lips and raven hair stood at the threshold. Her face wore the same expression of calm detachment as when Chadwick had last seen her.

"Come," she said speaking swiftly, "follow me. There is a place we can hide until it is over!"

The girl was dressed in a tight tunic which, Chadwick noted, was as outmoded as her space suit had been. Once more his brows kinked in concentration. There was something strange that he couldn't quite place, about her.

At another side passage the girl turned.

"Wait," she said breathlessly. Then she moved her hand along the damp stone walls of the passage, searching for something. She found it and in an instant an electrical whine filled the air. A moment later a portion of the wall moved slowly outward, revealing the brightly lighted interior of another stone chamber!

They were inside, the girl, Chet, and Monk, and the wall was swinging back into place. Chadwick faced the girl. "Come, now. What's all this about? Tell us what's happened, how you got here, who those poor devils shackled to the steel-hammering line are!"

The girl looked at them for a moment, her red lips half parted, her gray eyes misted. When she spoke her voice was low and liquid, like bubbling music.

"My name," she began simply, "is Naomi Brand. For what has seemed to be many years, I have been held captive on Titan—one woman with fifty men of our race. We are, all of us, earth dwellers. The monstrous creatures you have seen are the inhabitants of Titan—spindle-legged beings who have lived for centuries in the depth of Titan's darkened sub-areas."

Naomi Brand seemed to shudder for a moment, then, mechanically, as if she had told the story to herself repeatedly, she continued. "When we first fell into the hands of the creatures of Titan we were on our way back to Earth. We had no suspicion that such danger lurked on this planet. But swiftly, and without warning, the Titans captured our party, killed my father, and all the women save myself."

Chadwick was swallowing hard, his brow furrowed with a frown.

The girl went on. "They took the men, shackling them to stone—as you saw—and made them slaves. Myself, when they found I was unfit for work, they permitted me to survive somehow." Naomi Brand broke, her voice choking. "You are the first earthmen to arrive here since our capture. I have waited, prayed, for aid—and now that you've come, you, too, are victims of the spindled monsters."

Naomi Brand broke into sobs, and Monk Sands moved instinctively to her, put his arms comfortingly about her.

"Okay, Romeo," Chadwick snapped. "Break it up. We've got a lot to get done, and a lot more to find out!"

Monk Sands glared at his fellow pilot savagely. "Listen, Chet, this poor kid has gone through a million hells. Don't you have *any* heart in you?"

Chadwick's lean features were grim and uncompromising as he replied with a fierce patience. "Look, Monk. This is no time to get full of tears and flapdoodle. We're in one helluva jam, and unless we can figure this thing out pretty quick— we're never going to have to!"

Naomi's tears stopped as suddenly

as they started, and she turned her lovely face to Chadwick questioningly. "What will we be able to do?"

Chet started a furious pacing back and forth across the damp floor of the stone chamber. Desperately, he tugged at a wild lock of his lank black hair, as if in an effort to drag ideas from his skull by the violence of the gesture.

"Have to know more," he said, stopping suddenly. "What were you telling me before—about 'sappers', I mean?"

Naomi's eyes were wide. "The brain sappers?"

Both Monk and Chadwick showed their amazement in the glances they turned on Naomi. "Brain sappers?" they chorused bewilderedly.

"Yes," Naomi answered. "The sceptre held in the hand of the King Titanian. It is charged with electrical vibrations from his body, I believe. When waved above the head of an earthman, the voltage set up produces a state similar to hypnosis."

"How do you know this?" Chet demanded.

"Why," Naomi answered in perplexity. "It was done to the men on the long stone platform, when all of us were first captured. It is the reason why they have never been able to plan, plot to free themselves from the domination of the Titanians."

Sands' face was pale as he turned to Chadwick. "Chet, good Lord, did you hear what she said? That electrical hocus-pocus was done to both of *us*, too!"

Chadwick bit his underlip. "Yeah, it was. But, so far, there hasn't been any effect on either of us. And the girl —," he broke off, turning to Naomi. "What about it? Was the 'sapper', or whatever you call it, used on you?"

Naomi shook her head in negative reply. "Just on the men," she said.

Suddenly Chadwick took a fresh attack on the problem. "You haven't seen the men who were captured in your party—except from a distance—since they were shackled to the work line, have you?"

Naomi shuddered. "No. I have only seen them from a distance."

Chadwick sighed inwardly. Then the girl didn't know the change that had come over her friends since their capture. It was just as well. If she were to see them now, half-human, gibbering—.

"There's only one thing we can do, Chet," Sands' voice brought Chadwick out of his speculations. "We must get back to the spaceship. We've got weapons aboard that can burn these monsters to an elongated crisp."

Chadwick looked at Naomi. "How well do you know these underground passages?"

"Perfectly," the girl answered. "I have been allowed to roam."

"Good," the lanky pilot broke in. "You'll have to lead us out of here, and up to our ship."

The trio was moving toward the wall exit of the chamber, and Naomi was tugging at the stone that would set the door in motion, when Sands spoke.

"Wait," he said. "Our space gear has been taken from us. We won't even be able to step out into that atmosphere without it."

Chadwick cursed. For a moment he hesitated. Then Naomi broke in. "It is all right. I know where there are other space suits. The ones that were taken from my party when we were seized!"

Both men looked at the girl with relief. "That's all I want to know," Sands declared. "Let's get going!"

THROUGH the darkened passages and along the damp corridors, Monk and Chet followed Naomi. After

what seemed to be miles of groping progress, the girl halted.

"In here," she whispered into the darkness. They followed her through a low opening in a dimly-lit alcove off the passage.

"We are just below the main chamber," Naomi whispered. The sound of sledges, ringing faintly in the distance verified her remark.

Naomi crossed the tiny cave and bent over a mound in one of the corners. When Chadwick and Sands joined her, they saw that she was rummaging through a pile of dusty, antiquated, space suits. "Here they are," she breathed. "Select suits to fit you."

"Must have gotten these at an antique sale," Sands muttered as the three began to dress themselves in the outmoded space gear.

"These belonged to your party?" Chadwick said curiously.

"Yes," Naomi replied. "But they have not been used for some time."

Chadwick was directly under the ceiling opening, and as he climbed into the clumsy suit, the glow struck directly on lettering that was stamped inside his space jacket. For a moment he looked at it in stark disbelief. That date—He opened his mouth, as though to speak, then abruptly clamped his jaws tight.

In order to facilitate conversation, the trio carried their antiquated space helmets under their arms as they moved along the passageway. Although Sands and Chadwick were forced to hold fast to each other's belts, Naomi moved swiftly along through the utter blackness without faltering for an instant. Chadwick's eyes narrowed as he noticed this, but he said nothing. After what seemed an eternity of pushing along through the darkened tunnels of Titan, Naomi paused, pointing to a faint glow far down the corridor.

"That opening," she said, "is one I discovered some time ago. It is too small for the Titans and was made when —" she stopped abruptly. "It is too small for the Titanians," she repeated quickly, "and consequently is unobserved and unused by them."

For a second, Chadwick felt an unexplainable chill run down his spine. Then Monk was talking excitedly. "There's no sense in all three of us trying to make it to the space liner. It merely triples our chances of being discovered. One of us will have a better chance alone, Chet. And the other can stay with Naomi." As Monk spoke his arm was once again around Naomi's waist.

"You wait with me, here—Monk," Naomi said softly. "It is so dark, and I fear the horrible creat—"

Chadwick broke in. "Okay," he snapped, "it looks like I'm elected. You two remain here. I'll be back—with enough ray juice to fry this joint." He looked at Sands for an instant, trying to flash him a message, but his companion was gazing, cow-eyed, into the girl's lovely gray eyes.

Moments later, Chadwick made his way cautiously forth from the tunnel opening and out onto the barren wastes of Titan. He moved swiftly, taking shelter behind occasional lunar rock formations. He saw no sign of the Titanians, but remembering their swift approach, took no chances. In the distance, he could see the gigantic space liner, apparently unmolested as yet.

Working his way along slowly but steadily, Chadwick gave thought to Monk, back in the cave with Naomi. There was something fishy, something very fishy, about that girl—about this whole damned mess. Those half-human slaves in the enormous cavern—Naomi's party—could they have degenerated so, merely through hypnosis ad-

ministered by the King Titanian.

Suddenly two spindle-legged Titanians moved across his line of vision. Chadwick dropped flat on his face behind a rock. They disappeared, finally, behind a series of crags some five hundred yards away. Chadwick moved once more.

And these suits—antiquated, impossibly outmoded, Naomi had said they belonged to her party. Chadwick's lean face, beneath the turret of his space helmet, was worried, perplexed. What was all this adding up to?

Chadwick was a hundred yards from the space liner when his jaw dropped open in amazement. It wasn't the spaceship which he and Monk had arrived in—but instead, was a weather-beaten, smaller, odd-looking craft!

He cursed, fluently, roundly, savagely. Precious moments wasted because he had mistaken this for the space liner in the murk! An unbidden thought brought an odd feeling creeping up the base of his spine. Was this the space ship used by Naomi and her people when they arrived on, or were leaving, Titan!

"I've a hunch," the lean pilot muttered to himself, "that this is going to fill in a lot of answers!" He advanced to the weatherbeaten space craft.

Fifteen yards short of the ship, he stopped. "My God," he said hoarsely, "it can't be!" His lips moved mechanically as he read the inscription on the side of the ship.

"PLANETARY MINING CORPORATION," it said. "TITAN RADIUM BASE". Then, underneath the huge lettering: "Final Expedition, 2000 A.D."

EVERYTHING was swimming before Chadwick's eyes. 2000 A.D.! Mechanically, he approached the ship. Five hundred years old! *Five hundred years old!*

The gnawing suspicion that had been preying on him for the past hours was now a ghastly certainty. Naomi and the slave-men of the Titanians were the surviving members of the last mining expedition on Titan—an expedition that had been concluded five centuries ago. *Somehow, in some incredible fashion, Naomi and the men on the work platform in the cavern had remained alive on Titan for five hundred years!*

He pictured Naomi, probably in the arms of his pal at that moment. Unexplainably he shuddered. *Five hundred years old!*

Then he was inside the ancient spaceship. Everything, as he moved about the cabin, confirmed his suspicions. Every gadget, instrument, and weapon in the ship was an antique in space travel. But everything seemed miraculously preserved—*preserved like Naomi.*

Chadwick strapped several old-fashioned rocket guns to his waist and clambered out of the ancient space ship.

He paused for an instant, to test the antiquated weapons on a jutting rock formation just outside the ship. They performed admirably, burning blue holes in the rock. Chadwick stuffed them back in his waistband and proceeded on.

Chadwick was not interrupted on his way back to the tunnel entrance. As a result, he was back at the entrance in less than ten minutes. He looked back over his shoulder before entering the shaft. All clear. He hadn't been seen.

"Monk," Chadwick took his helmet off, and shouted down the darkened passage. "Monk! Where are you?"

There was no answer. A moment later, when he came to the place he'd left his pal and Naomi, they were nowhere to be seen!

Then he was moving, almost run-

ning, down the long passageway of the deserted radium pits. His breath was hot in his lungs, and fear burned in his brain—fear that he was late, too late, to do anything for Monk.

"That damned little fool," Chadwick gasped. "I should have seen that he'd gone daffy over the girl. He was ready to do any fool stunt she asked of him."

Chadwick lost track of time. As he groped, half-running, half-stumbling, along the damp darkness of the tunnel, everything but his one determination became a blur to him. It might have been hours, or merely minutes, before he stumbled upon a side shaft leading to a white glare of light in the distance.

"The cavern," Chadwick muttered. "That must be the main cavern to the joint!"

He burst into the enormous high-ceiling room. The sight that met his eyes stunned him momentarily. Monk was playing hero to a packed house!

Perhaps forty Titanians stood stoically herded in a corner, their tentacled arms hanging limply at their sides, their flat, expressionless faces fixed unwaveringly at a small spacesuited figure before them—Monk Sands.

Chadwick's flickering glance took in the dais where the King Titanian had held court, and gasped. The spindle-legged creature was sprawled grotesquely forward on his face, feelers outstretched and twitching spasmodically. There was a flaming red hole in the center of the monster's body!

Monk Sands was holding an ancient rocket pistol, pointing it on the emotionless Titanians.

At the far corner of the room, moving along the stone platform and unshackling the hairy, aboriginal men, was Naomi! Chadwick shouted.

Monk wheeled, to look swiftly in his direction. At that instant the first of the Titanians lunged awkardly but swiftly forward. Chadwick brought one of his rocket guns up level, prayed for accuracy at that distance, and squeezed the trigger.

The gun flashed flame. The Titanian fell to the cavern floor—a hole burned through the center of his strange head. Then the others were moving—heedless of the pistols of the two earthmen, their flailing tentacles snapping through the air with the speed of whips.

Monk dashed toward Chadwick, and the two stood side by side. In the next confusing moments Monk and Chet pumped their ancient weapons for all they were worth, sending one after another of the onrushing Titanians crashing to the stone floor.

Chadwick had felled one of the creatures, burning through the monster's spindle legs and didn't notice the creature moving along on its stumps toward him. He heard Monk's hoarse shout, stepped back in time to avoid the stinging blow directed at his head. His gun flashed again, and the creature sank to the stone for good.

"Come on," Chadwick shouted. "They're too much for us. Lets get the hell out of here!"

Monk gave him an astonished look. "Leave Naomi? Don't be a sap. Do what you want to do, Chadwick, I'm staying by her!" Their exchange was cut off once more by the necessity of rapid rocket work on more advancing Titanians.

Sweat ran down Chadwick's angular face. He cursed loudly. From the corner of his eye, he could see Naomi freeing the last of the half-humans.

THE shrieks and yowls of the horde of hairy Earthmen dashing heedlessly across the stone floor toward the spindle-legs was a horrifying din. The

(Concluded on page 99)

THE MATHEMATICAL KID

by Ross Rocklynne

"You're heading for a crack-up!" warned the kid. He said it so often he succeeded in becoming a nuisance. But then...

I WAS walking fast down the quarter-beam tunnel toward my watch on the skipper's bridge, shrugging on my first mate's coat, when,

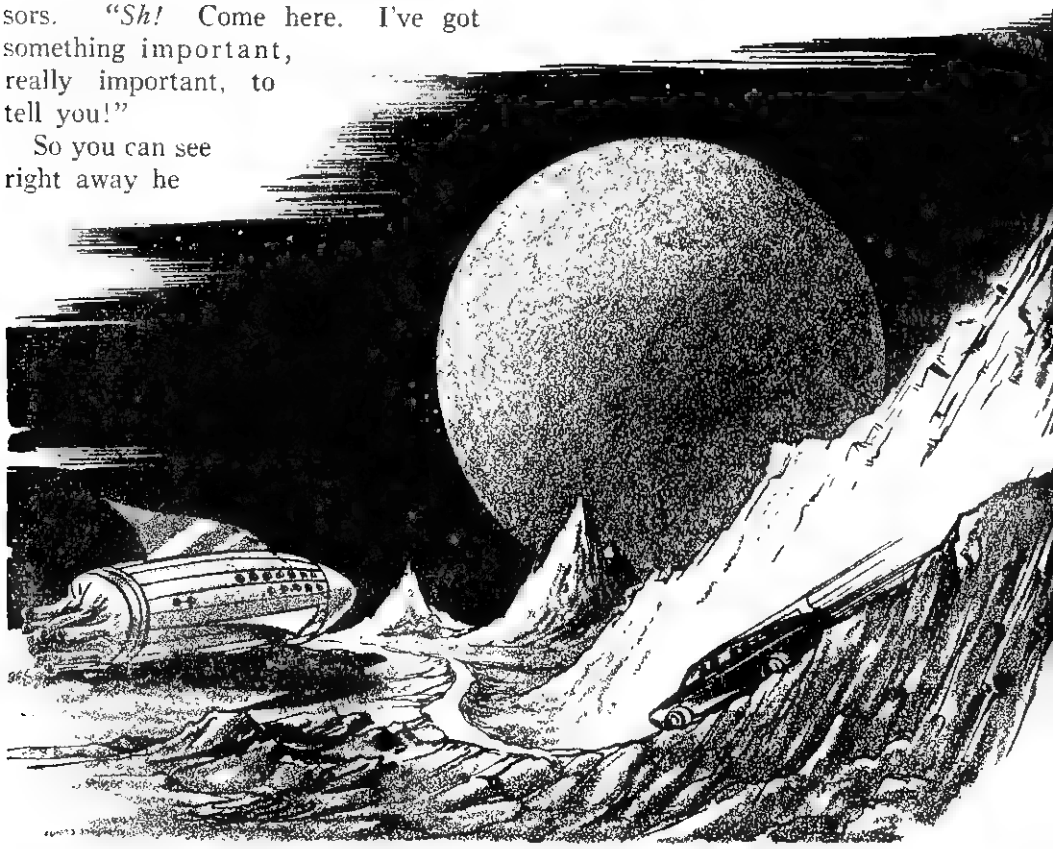
"Psst!" he whispered, beckoning me from under the companionway.

I stopped, pivoted my head. It was the twerp. I said, staring,

"Well, what the hell do you think you—

"Sh!" He waved his arms like scissors. *"Sh!* Come here. I've got something important, really important, to tell you!"

So you can see right away he



Behind the cars an avalanche roared down, bent on their destruction.

was a twerp—our new cabin boy. It was emergency that made me and Old Scratch—he's the skipper—take him on. Yesterday, just before we hit heaven, he had snuck up the gangway and bearded Old Scratch on the bridge.

Kind of a funny kid, built like an asteroid hard and rocky, yellow hair sticking out of his head like straw from a scarecrow, eyes glowing like blue neon signs advertising the presence of his turned-up, butt-end-of-a-peanut nose. It was funny, darned funny, that he had showed up just when our regular cabin boy was missing and we were getting ready to shove off.

So we had to hire him. Then Old Scratch and I shooed him off the bridge, and we went on checking and rechecking the orbit figures the Corporation

had computed for us.

And now here was the little werp acting mysterious, as if he had a conspiracy on tap.

"All right," I growled, "spill it!"

"Listen to me!" he hissed, pulling my head down to his with a half-Nelson. "Nobody else will. I tried to tell the captain, but he flew off the handle. Do you know why I took this job?"

I said, sarcastic, "Sure. You was working your way through—"

His neon eyes snapped.

"No, no!" His police siren voice sank to a hoarse whisper. "That isn't it! I took the job because I wanted to save the *Aphrodite* from cracking up! Yes, I did, actually and literally!"

"Hey," I yelped, drawing away, "are you bats? Here we are, only three units out from the mother planet, and you're wobbly already!"

He grabbed my arm excitedly. "You're traveling the EPlx344 orbit, ain't you, Sandy? Well, that's the wrong course. I'm telling you for your own good, and you better switch over to another one quick! The *Aphrodite* is due for a crack-up eight days, seven hours, and forty-three minutes plus or minus from this very second!"

"Stow it, fellow!" I said real sharp. Then I spoke kindly, as I turned away.

"Go to your bunk and climb in, and I'll make your apologies to the skipper. Now get along, and wait until you know something about celestial mechanics before you go letting your one-horsepower brain do a hundred-horsepower job.

"Remember, you're not any Georgie Periwinkle." And I left him with that, though I did feel a little bit guilty, because his face fell a mile. But it was a laugh, him trying to tell *us* we were following a collision course.

THE next day, I left the bridge for a couple minutes, and went down the engine room to see what in Hades was causing the sour note in the Wittenberg* howl—the chief engineer told me that there were air bubbles in the lead cable. When I came back up on the bridge, the kid ran out.

He looked at me accusingly, and pointed a stubby forefinger at me and bleated.

"He wouldn't listen to me, and neither would you! You're going to be sorry!"

"Listen, Kid," I said patiently. "I think we've had just about enough of this stuff. I warn you, quit bothering us, or I'll warm the seat of your pants so hot you'll never forget it!"

"What ails that kid?" snarled Old Scratch, his red, puffed-up beacon of a nose winking. He slammed his charts down on the table and glared at me as if I was a source of misery.

"I ought to fire you, damned if I shouldn't, for letting me hire him in the first place!"

"Say," I yelped, "you mean to say *I* hired him? Why, you old—"

He settled down. "Hold your temper, you old space hound," he snapped. "Maybe we have been up and down around the sun all our lives together, but that don't give you no extra privileges, see?"

"Yes, sir," I simpered.

"Now, Mr. Flabberty!" he growled. "Who's putting crazy ideas in the kid's head? If it's *you*—"

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*Wittenbergs are the motors invented by Silas B. Wittenberg, late in the century, which supplanted the dangerous rocket drive by direct explosion. In this type motor, the possibilities of control are much extended, and the danger of explosion of the entire fuel supply is eliminated. Lead cables conduct the mixed gases to the outer firing chambers, and prevent static electricity sparks which are quite a problem around metal parts in space. However, a weakness still exists, in the air bubbles which frequently obstruct the cables and cause uneven fuel mixture. This results in a howling noise.—Ed.

"Aw, be yourself, Cap'n. He's got a touch of the wobblies, that's all."

"See atmospherics then, and have his air regulated. I ain't going to have no wild kid gumming up this run. We got a load of ten-thousand-dollar, airtight automobiles to get to Pluto in the next sixty days, and whadaya think's gonna happen if we don't get them there in time, huh? The Corporation'll give us the bum's rush, that's what!"

"He been bothering you that much?" I demanded, incredulous.

"Damned right he has! Beggin' me with tears in his eyes to change our orbit. Beggin' me if I won't do that, to cut our acceleration down to half a G, for three days at least."

I gasped, "What for?"

He said aggrievedly, "How should I know? He's enough to give anyone the meenies, that's what. I'll begin to believe our course is all wrong myself. Keep him outa here—he worries me."

The skipper shifted on his big feet uncomfortably, cocked an impatient eye at me.

"Recheck our course," he growled. "And then check it again. Go on, you, get going! And when you're finished, put that crazy kid in the brig!"

So I wearily checked and rechecked, and checked again, and I began to think how nice it'd be to step on the kid's face.

I made a mathematical sweep through 10° of the ecliptic plane, and just to make sure went 20° above and below, using the *Ephemeris* and a slide-rule to calculate possible *puncti*—and there wasn't, and would never be, even a rock in our trajectory; not unless it was above 20°, coming in at a 90° angle and at an impossible speed—and we all knew there wasn't anything like that.

So we had clear sailing. The ether was clean. We could plow right through. Hadn't I just calculated it? Sure.

So I knew the kid was wobbly in the bobbly, and it didn't hurt my conscience a bit when I cornered him in the galley and stuck him in solitary. We left him there—two and a half days. Yes, you guessed it—at the end of that time, all hell broke loose!

FIVE days out; and following the EPlx344 trajectory, the Wittenbergs went dead, and the *Aphrodite* coasted. We were on schedule, we were doing a neat hundred-point-oh-three miles per second, and we forgot about the kid.

Then—right in the middle of my snore-watch—I was jolted out of my dreams by Old Scratch's voice screaming from the general audio.

"Attention all!" he roared. "Attention all! Rock ahead! Wittenbergs! *Wittenbergs!* Get them Wittenbergs howling! Lane! Two gravities fore!"

I bounced out of bed, pulled my pants on and went sailing for the bridge. The chief engineer came charging down the corridor in his nightshirt.

"Two gravities fore!" he was gasping. "Jerusalem H. Slim!"

Old Scratch was still blaring into the general audio, when I came in.

"Two gravities fore! Larramie, lay off the pilot blasts—you'll send us through the bulkheads, at this speed! Telescope! Give me the dope on that again, and if you've made a mistake, I'll make a personal autopsy on your gizzard to see what brand you're using!"

"89° to the ecliptic," the telescope man's frightened voice said. "Almost perpendicular. There ain't nothin' like that! 14—16—20—50—100—150—160—Great God," he yelled, "the tape reads 163 per. I just don't believe—"

"Shut up!" Old Scratch snarled. "Believe your machines! Two and a half gravities fore!" he roared.

And the Wittenbergs began to whine,

and crescendoed upward until a hell of awful sound shook the air. I had to stand at a slant. As I walked toward the console, I felt just like I was walking up a forty-five degree hill, only worse.

"Three gravities fore!" Old Scratch snarled.

"We can't take that!" I panted.

"I'm gonna take it, and so'll everybody else. Whip it up—three gravities!"

Chief Engineer Lane began to whip it; and I began to weigh 540 pounds.

"What about the kid?" I whispered.

"To hell with the kid!" he yipped. Three gravities were straining his 200 —600 now—pounds back against his braced chair.

He yelled out, "Four gravities fore!" and that was the end of me. Old Scratch tests out at five gravities, I can take four and a half most of the time. But this was one of my off days. I was forced back against the wall, and saw something big and gray rushing at us in the view-screens.

I couldn't breathe. If that wall hadn't been there, I'd have gone tumbling the whole length of the ship. When Old Scratch added another fraction of a G, I began to give way inside. Everything blurred.

Suddenly the ship swung. It must have, because I fell clear across the room, bounced soggily into another wall. The Wittenberg howl tore at my eardrums. I felt a huge wave of sound and pure vibration surge through the ship. And then *bang!* I was gone—just like throwing a knife switch.

I WOKE up, and felt light as a feather. I opened my eyes. I moved an arm, pivoted my neck, saw a row of beds filled with patients. I groaned. Then I began to get heavier and heavier, as the gravity perspective came back; and soon I knew that something like maybe only one, or one and a half gravities was sitting on me.

"Feeling better?" Dr. Ran Tabor came across the room, grinning all over his drunken face. He was our ship doctor, sort of a renegade from the profession.

Somehow I asked about the kid first.

"Him? Up and around last two hours. Some kid, him. Got bones like rubber bands. But you're brittle from the fuzz on top of your head down to the nail on your big toe. You got two busted ribs."

"Did we—did we crash?"

His brows came up. "Ha-ha! Sure, we crashed. Hard. Ha-ha! Aft section stove in—hospital full—main jets wrecked— Do you blame me for gettin' drunk?" He scowled.

I sank back wearily. "Send me Old Scratch, if he can make it."

Tabor scowled. "Nothin' could hurt that old buzzard."

Old Scratch came charging in after awhile, his eyes stormy. He all but shook his fist under my face.

"You!" he snarled. "A big, strong man like you foldin' up under four and a half gravities, and just when I needed you to—"

I yelped indignantly, "Why, you old—"

"Shut up!" Then he softened. "You know what happened? We tried to swerve at the last minute—the pilot blasts. Didn't work. They just twisted us around on our center of gravity, and the ship bounced her stern against the planet, stove in the supply hold, and tore up the main jets into scrap metal.

"So now we're caught here, see? There ain't any way of lifting her. This is a one and a half gravity planet."

He gnawed at his unshaved lip; he glared at me as if he thought I ought

to be the angel of deliverance.

"We should be able to lift her some way," I began.

"With the forward jets? Don't be stupid. The firing area ain't enough to lift us from a one-gravity planet, let alone a one and a half. Well, you lay there, and figure something out, and get those ribs healed up, sissy!" Then he went charging out of the hospital.

Couple hours later, the kid came in, his eyes glowing with excitement. He came right up to me. Maybe he thought I was his friend even if I did treat him rough.

"I think I've found something," he said excitedly. "It's wonderful. It really is. But first I have to test it."

"Test what?" I scowled.

"Test the planet," he said in surprise, just as if he was talking about dropping something in a retort and boiling it over a Bunsen burner.

HE got enthusiastic again. "You see, the main thing that's bothering the captain is that this is a one and a half gravity planet, and the ship is so bunged up it can't draw away from anything more than half of that—that's what Old Scratch said.

"So the thing to do," he went on, impressively, "is to decrease the amount of gravity pulling on the ship!"

And he gave me a "see how simple it is!" look.

I groaned, and almost gave up the ghost.

"Who told you about this planet," I said weakly, "and how big is it?"

"Nobody told me about it, and it's three thousand miles in diameter!" Then he stepped back and his neon eyes lost their enthusiasm, and flared with anger.

"You're like Old Scratch and everybody else!" he bleated ragingly. "I told you days ago the ship was going to crack up, and now when it does, you think that somebody else told *me!* I computed it myself! I saw your orbit figures in the Astronomical Section of the *Philadelphia Herald,* and I had just discovered this planet, and I saw right away you were going to crack up.

"I'll fix *you* guys!" he cried. "After this, when I find something, I won't say a word. No, I won't. I'll let you figure it out yourself—*pickle-puss!*"

And then he turned away and marched fuming out of the room. Then for the first time I began to wonder if we weren't misjudging the kid and treating him too harsh. But I forgot all that by what happened next.

* * *

Two days later, the sawbones braced me with a couple yards of adhesive and let me get up. I dressed, feeling wobbly, what with one and a half gravities on me, made my way to my office in the ship, made out a requisition for a pressure suit, and then looked up the maintenance man. He measured me with one eye while he picked a pressure suit off the rack with the other.

The tender let me out the airlock into the middle of a big, smooth, dark plain ringed with low hills about six miles off, I guessed. The stars in the black sky were cold, fixed points of lights, so I knew there wasn't any atmosphere.

At the stove-in stern of the *Aphrodite,* a half dozen of the boiler boys were at work with oxy-acetylene torches. They were bungling the job, and Old Scratch knew it. But he kept them at it, trying to weld those shapeless masses back into position again.

"Oh, so you're up after takin' it easy two days," he snarled. He glared, but beneath the glare he was a confused, helpless old space hound, wondering how in the devil he was going to get a hundred and ten airtight automobiles to

Pluto in the time called for by contract.

"If you've thought of anything, Mr. Flabberty," he growled, sarcastic, "I wish you'd spill it, instead of keeping us in such delightful suspense. How do we get away from this one and a half gravity planet?"

"Easy," I told him, grinning all over my face. "You decrease the gravity to, say, three-fourths of a —"

His face began to screw up, and he took a step toward me.

"That's just what the kid said!" he growled, with murder in his eyes.

I BACKED up. "Hey, wait a minute! Don't blame me if the kid said it," I protested. "And besides, since he did predict the crack-up, he might be right about this, too!"

"My dear Mr. Flabberty! Of course he's right. All we have to do is decrease the gravity. But maybe the planet won't lay down and wave its hind legs in the air like the kid thinks!" he thundered.

"And as for the kid predicting the crack-up, I got my own ideas about *that!* Somehow he found out that the Corporation had deliberately plotted us a bad course. And for why? Why, so they could collect insurance on the old tub, that's why. As soon as we get outa this mess I'm gonna collar that kid and find out just where he got that information, so help me, I am!"

And looking at him, I suddenly began to feel sorry again for the kid. He was just plain poison to Old Scratch.

I looked around. Few miles away, just like we were in the center of a big crater, were a ring of low hills; and beyond that the land stretched away into a clear-cut horizon. I turned around and around, looking for the kid, but I didn't see him.

That was funny. He hadn't been in the ship either. Maybe he'd gone for a walk somewhere. Maybe he'd got lost.

"Good riddance!" said Old Scratch disgruntledly. "That'll be one less passenger we have to carry along."

* * *

BUT five or six hours later, when we are all eating in the mess hall, the skipper went into a rage, pounding his fists together.

"It ain't enough that we can't lift ourselves," he panted wildly. "It ain't enough that we can't repair the main jets. Now we have to organize a search party, looking for a damned half-pint Jonah!"

But we did do just that, four groups of us starting out under the cold stars in four different directions. We got about two hundred yards away from the ship when Wilkes, our electrician, said in awe.

"Here comes that there moon."

The rest of them had seen that moon, but I hadn't, though I'd heard about it. I gawked. It came thundering over the horizon, like six white horses around the mountain. It was small at first. It got visibly bigger as we traveled along. It came faster, while I almost broke my neck watching the crazy thing. It swooped at us, getting bigger, coming faster.

At the end of an hour it was over our heads, five times as big as when we first saw it, and going like Mercury in a planetarium. It couldn't have been more that fifteen, maybe twenty thousand miles away. Then it began to go toward the other horizon, getting smaller, farther away, decelerating.

At the end of two hours, when we reached the foot of the hills, it had completely gone from horizon to horizon, accelerating, growing in diameter, decelerating, shrinking as it set.

"Wow!" somebody breathed. "Crazy moon!"

Old Scratch, still itching to get his

hands on the kid, said, "T'hell with it! It's just got a highly eccentric orbit."

But, of course, none of us knew why.

WE started up the hill. The ground was rocky with strangely smooth boulders, as if they'd rolled a long ways. There was sand, too, and small pebbles. We topped the hill, the four of us, and stood looking out over the plain.

Suddenly we saw something, a little black dot, rolling along toward us down there on the plain.

Wilkes gasped unbelievingly, "It's an automobile!"

I looked at Old Scratch and saw his face getting redder and redder behind the helmet of his pressure suit. His lips mumbled something. After that we were all silent, waiting while that airtight, torpedo-shaped automobile, made for traveling in rough country over almost any gravity, came nearer and nearer. It started up the hill and stopped about twenty yards from us, with the kid at the wheel.

We stood there in grim silence. The door opened. The kid got out, took one look at our faces, and then scrambled back in. Through his radio headset he panted.

"Don't you come near to me! Don't you touch me. Because if you do, I'll tell my friend the President of the United States. I had to steal the automobile from the hold—I had to test the planet!"

We were looking at the tires of the automobiles. Ripped to shreds. We were looking at the paint job. Dented, scratched, a mess. We started toward the automobile.

But the kid stepped on the starter, swished forward, detoured around us at the last second, and then stopped about forty yards away.

"I promise to ride you back to the ship," he panted excitedly, "if you promise not to get rough with me. Anyway, you *can't* get rough with me!" he pleaded. "I've found a good way to decrease the gravity!"

"We promise not to get rough with you," said Old Scratch, in an 'it gifs candy und ice cream' voice. And so help me, we didn't—then! When we got back to the ship, Old Scratch and I waited around until the kid got his pressure suit off, and had himself exposed. Then we both leaped at him.

"Me first!" said Old Scratch, holding up a hand. And he went at it, and laid it on so thick I didn't have the heart to add any more to what he deserved. We sent him to solitary for two days.

We found later that the car was all out of line. The kid must have put it through some rough punishment, because those cars are built to withstand a lot. Not that it was going to hurt our contract—we only had to deliver a hundred cars. We had ten extra, just in case; it was just the principle of the thing.

Then, with that episode off our hands, we began to drive ourselves crazy trying to think of ways and means to get off this world. Our transmitting apparatus wasn't powerful enough to signal somebody to come and get us.

And if we waited around for somebody like Georgie Periwinkle, the mathematical genius, to discover this planet and start an exploration, why we'd all be starved; or, at the least, we wouldn't get our precious load of automobiles to Pluto.

No matter which way you looked at it, things were an unholy mess.

AND then the kid went and did it again.

We had been bottled up on the planet a week. We had stopped working on the main jets—they just wouldn't fix. Old Scratch and I were sitting on the

bridge and looking at the walls, hopeless, when the doors open and in comes the kid.

Old Scratch made an annoyed, tired sound.

The kid's face was flushed. If I didn't know he was just a kid, without any sense in his head, I might have thought the look in his eyes was dangerous. So I just looked at him, my mind a billion miles away.

The kid was almost panting with some kind of nervousness.

"Cap'n" he husked, "I know how to get us off this planet!"

Old Scratch muttered to himself, "Yeah? Run off and peddle your peanuts some place else. Can't you see we're busy? Besides, you're fired."

The kid's voice trebled. "You better listen to me!" he panted.

Old Scratch looked at him. A gleam came to his eye. The front legs of his chair hit the floor, and he started to roll up his sleeves.

Quick as sound, the kid leaped back, his eyes just like slits. Suddenly my breath zipped from my lungs at what I saw.

"Stand back!" he yelped, as I came to my feet and started toward him.

"Put that paralyzer down!" I snapped. "You want to hurt somebody?"

"Stand back!" he yipped, fairly dancing on his feet.

But I knew he was just a kid, and that he wouldn't pull the trigger and I started toward him, sore as a boil, when suddenly—well, suddenly. I was out cold. Dead to the world. Something had nudged my brain, had short-circuited certain nerve centers.

And that was absolutely all I knew until I opened my eyes, and there I was in that all-fired ship's hospital again, and Dr. Ran Tabor was breathing his liquory breath into my face.

The quartermaster, the chief engineer, the maintenance chief, and half a dozen others were standing over me.

They started yelling all at once.

"What happened?"

"Where's the captain?"

"Where's Johnny?"

So I told them, and then they told me.

Old Scratch was gone, not a trace of him or Johnny anywhere! And to tie the whole thing up, the airlock to the freight hold was open, and another automobile was missing!

"He kidnaped him," the quartermaster said. "Well, I'll be a horse's neck. It just don't make sense."

I struggled to my feet, jabbed a finger at Wilkes, Lane and Cummings, the quartermaster.

"Break out another one of them automobiles," I snapped. "We're going to find that kid, and when we get him—"

I DIDN'T know exactly what I would do with him. But it would be something drastic. Something horrible. Something ghastly. Yes, it would! And if I felt that way, how would Old Scratch feel when we finally freed him? I began to get happier with each passing second.

We made the low, sloping hills in fifteen minutes, following the path the kid had taken the time before. We went beyond the hills, winding our way around unbelievably smooth boulders, following the tire tracks through the sand and gravel. We went pretty fast, hitting high as much as we could, and after about an hour we noticed the plain was beginning to slope—all at once. I mean, the whole plain was tilting up.

"Say, that's funny!" said Cummings.

I'll say it was! It got even funnier. The farther we got away, the more the plain sloped. It went past 20°, started hitting 30°. After about five hours—

we were still following the tire tracks—it went up to 45°!

We must have been four or five hundred miles away from the ship at that time. And the hill stretched endlessly upward, and endlessly to each side, and endlessly downward.

Practically speaking, it was a plateaulike surface, stretching away evenly in all directions, with occasional small hills and swells growing out of it. A lopsided plain!

It was the mightiest, eeriest, most colossal hill I've ever seen or ever will see, because it never seemed to end, though we went up for miles and miles and more miles.

We saw that crazy moon, and did it have an eccentric orbit? It did! It came 'small over the horizon, and slow. And got smaller, went slower until, even when it set on the horizon that was the apparent top of the hill, it was so distant that we couldn't see it at all!

We pushed on, our mouths open, so absolutely flabbergasted we couldn't say a word. We began to feel lightheaded. We began to make motions that moved us further than we meant them to. We couldn't understand it at all!

And then we saw the automobile, Old Scratch and the kid. Just a tiny black dot way up there, coming toward us at a terrific clip. It detoured swells and small hills, missed boulders and detritus and gullies by hairbreadth turns, coming on as if hell was sitting on its tires!

And then we saw why.

And it sent a chill down our backs as we watched. It was a death race with an avalanche, that was—and *what* an avalanche! It was a mountain of boulders and detritus and talus, and small hills, and it filled the whole horizon.

I stared at it through the windshield, chills racing up and down my spine. The kid drove like mad, and we could see Old Scratch in the seat beside him, his face florid. They were near now, and Old Scratch was making wild, crazy gestures.

What for? I don't think any of us realized that the avalanche was after us too, until Lane suddenly blasted in my ear.

"Wow! Turn the car!"

DID I get it then? I did! I wish you could have seen the way I wrenched that wheel over, started the atom-motor to growling! The battered machine squealed, but she yawed over, went into high, made a neat semicircle and started down the hill. Man, did we let her go! There was the colossal hill stretching below us, and the avalanche behind us, and we *went*.

And the kid came after us, just keeping away from the grinding teeth of a moving mountain by the length of a whisker.

We detoured hills, frantically sought routes around gullies, made hairpin turns, yelled with glee when we hit the straightaway. Sand and rock and pebbles skittered under our screaming tires. We plunged down that planetary mountain side as if the fires of hell were singeing the seats of our pants.

Wilkes pounded me on the back until I started coughing.

"It's catching up!" he blasted. "Faster!"

Faster? Ye gods, what did the man want? We were already doing a hundred and twenty. So I threw more mileage in on top of what I already had. And the hill was growing steeper, and I heard Cummings cursing steadily, profanely, unbelievingly.

I knew he was looking down that unending slope, chopped off in a great circle where sat the frightful, star-sprinkled black horizon. But I was the

driver, and I was looking at that horizon too, and it made my hair stand right up on end to think I was driving into it!

After awhile it became a nightmare. Detour, slam on the brake, scream around impossible curves, start up a hill that ended in a cliff, yaw around, look for a better way out—a straightaway! —and down we'd go.

And I had three mad men in the car with me, so excited they couldn't get scared. Pounding me on the back. Yelling in my ears. Telling me the kid was gaining on us, and that the avalanche was gaining on the kid.

Ye gods, how that avalanche had us at a disadvantage! *It* didn't have to detour! It just took the obstructions along with it.

Everything hazed up. After all, I'd just got out of a sickbed. My hand on the wheel, my feet on the pedals, began just to do the things they had to, without my telling them. So for the last half of the ride, I was just a passenger. And even after the lopsided plain began to level off, I drove like mad.

Lane, Cummings, Wilkes started to cheer like a grandstand of people, all of whom have bet on the right horse, and are right happy about it. They had to take the wheel out of my hands, they had to push in the brake.

When I came out of my daze, the hill was gone—the big one—and the plain was a plain, and not very far away I saw the chain of low hills that circumscribed the plateau on which stood our ship.

Then we got out of the car, and I staggered around like a drunken man, until I saw the kid's automobile come screaming to a stop beside ours. I looked at him, and then I looked in the direction we'd come from.

THE avalanche was gone. As it reached the slow end of the slope, it had begun to lose parts of itself. Finally there had not been any slope to speak of and it had just petered out, dead and gone at the bottom of the five-hundred-mile hillside. Or so I thought. I know what we all felt—Lane, Wilkes, Cummings and I. About the kid, I mean, for exposing us all to the avalanche. We stood around waiting until the kid got out of his car, and I think we all were just waiting for Old Scratch to light into the kid and beat the stuffings out of him.

The kid got out first, his face flushed with excitement. He started toward us, and then stopped when he saw the looks on our faces. He started backing up.

Old Scratch got out of the car. We started to grin all over our faces.

"Now watch the fireworks!" Cummings husked joyfully.

And what started popping was our eyes. And why? Because if this was fireworks, then somebody had lit a whizzer! Old Scratch looked at us and grinned—and then threw an arm around the kid's shoulder!

I couldn't believe it. "But the kid kidnaped you!" I yipped out.

Old Scratch beamed. "Don't I know it? Wow! What a ride! Kidnaping was the only way this here kid could show me what he wanted to show me. It took a hell of a long time for me to get some sense in my head.

"Johnny," he beamed, "suppose you tell these here ignoramuses where that there avalanche come from." He grinned maliciously. And we gaped.

The kid shifted from one foot to another, grinning too.

"It came from the top of the hill," he said, as if that was all he needed to tell us. When we didn't get it, he added what he thought was an explanation.

"That's on the other side of the planet."

"The top of the hill is on the other side of the planet?" I said, trying to be real polite. "Forty-five hundred miles away?"

"Sure," boomed Old Scratch, as if he had known it all along. He began to laugh, his body shaking.

"It's the funniest damn thing I ever run across, so help me, it is! Why, this whole planet is a hill—a mountain—doggoned if it ain't! It's a hill from top to bottom. And the bottom is right where the ship landed—in the center of that ring of hills.

"Them hills is parts of avalanches that rolled all the way from the other side of the planet."

He continued to laugh, until I yelped:

"For Pete's sake, and you in the prime of life! What d'you mean, it's a hill? That we landed at the bottom—"

And then I think I and Lane and Wilkes and Cummings began to get it, and our mouths started to fall open.

THE kid grinned. "Sure," he piped up. "I knew it all along, but you wouldn't listen to me. This world we're on is a big mountain—an off-center planet. The center of gravity isn't in the center of the planet—it's about three hundred miles below the surface. Below our ship, the gravity is greatest."

He was anxious for us to understand now.

"Maybe it's neutronium down there," he suggested hopefully.

I was feeling weak, and I sat down on the running board of our car. I looked at him dazedly.

"Go on, Johnny," I said weakly. "Then all we have to do to get off the planet is to decrease the amount of gravity pulling on the ship."

"Sure," the kid said excitedly. "I told you that, and you wouldn't believe me. The farther you go away from the center of gravity, the less it gets—it falls off as the square of the distance from the center."

He was getting enthusiastic now, and we listened to him tell us how to move the ship. That was because we were so dazed we couldn't talk.

"We use a few of the automobiles in the hold," he said, his eyes shining like a thousand watts. "We put two under the forward fins, two under the rear ones, two in the middle."

"But first we jack the ship up," said Old Scratch proudly, and then looked embarrassed as he realized that was pretty obvious.

"We hitch more automobiles up to the nose of the ship with chains," the kid went on. "Then we carry the ship over the plain and to the hills. There we look for a gap in the hills, and clear away some of the big boulders and get the ship over the detritus of the avalanches—maybe by making a roadway out of some rocks—and then we start pulling the ship up the hill!

"And when we get"—he stopped and his eyes got a preoccupied look, and then came back to us—"when we get the ship 733-point-three-nine miles away from where she is now, why, the gravity'll be exactly three-fourths of a G."

"Go on," I said. It was getting more and more like pretty music, the things he was saying.

"Why, then we can make it!" he said excitedly. "We can use the forward jets, and they'll lift us from three-fourths of a G! That'll take about—about two weeks, maybe. That leaves us thirty days to get to Pluto. And we can make it, too!"

His eyes went toward heaven again, and I thought I began to see mathematical symbols parading across his

cornea. He said, "Yes, we can! I'll compute you an orbit myself!"

Old Scratch began to laugh. It got so he couldn't stop himself.

"He'll compute us an orbit," he gasped, pointing at the kid. *He'll* compute us an orbit! And it takes an expert what's got a dozen years training behind him to do that.

"Now, you listen, Johnny," he said, speaking very kindly. "You're a smart kid to be able to figure this here planet out, but you ain't *that* smart! You let that there job of computing up to me or Sandy or somebody that knows Planck's Constant * from a board."

The kid's cheeks began to burn.

"You guys are the *dumbest* bunch of pickle-pusses I *ever* ran across! Yes, you are! I tell you you're on a collision course, and you crack up, and *still* you don't believe me. I figure out a planet for you, and tell you how to get off, and *still* you think I'm just a dumb kid that can't compute an orbit!

"How do you think I knew this was an off-center planet? Why I *knew* that those hills around the ship were just detritus that had rolled down the hill? The boulders were so smooth, just like they rolled a long way. And I figured the eccentric anomaly** of that moon, and I knew it came in close and went so fast because it had to, where the gravity was greatest."

"You actually figured the eccentric anomaly of that there moon?" said Old Scratch incredulously. "Now don't pull my leg," he added in warning.

"Sure I did! In my head, too. And I figured exactly where the center of gravity was."

We stared at him harder and harder. Things were beginning to click in my head at last! The kid began to flush. He shifted from one foot to the other, the harder we stared at him. He got a guilty expression on his face. He avoided our eyes, like he thought maybe we had something on him.

"I guess you guys got me pinned down," he blurted out finally, and his lower lip began to tremble. "Now I guess you'll send me back to the Philadelphia Science Institution. But I couldn't stand that dry, stuffy old joint. And when I saw your orbit figures on the paper, I knew you were on a collision course. So I sent a telegram to my friend, the President of the United States, and told him I was running away, and then I waited in an alley until your—"

And by that time I had it. I jumped to my feet, yelping to high heaven: *"Georgie Periwinkle!"*

The kid shifted from one foot to the other, embarrassed and ashamed-looking.

There was a big silence, and then everybody started to explode.

"Wow!" Old Scratch yipped out, and his eyes began to bulge.

Georgie Periwinkle, the mathematical prodigy, with six comets, two new planets—three, now—a new subatomic particle, and a mess of miscellaneous inventions to his credit!

Georgie Periwinkle flushed redder and redder while we stared at him.

"So we'll get to Pluto on time," he said, trying to change the subject.

But we kept looking at him, and finally we started grinning all over our fool faces. Georgie Periwinkle! Did *we* feel wobbly!

The kid said, uncomfortably, "And

(Concluded on page 129)

*Max Planck was a German physicist, who first asserted that the energy of radiation is emitted and absorbed in integral multiples of certain indivisible "quanta" of energy which depend on the frequency of the oscillation of the electrons. This law of radiation is called Planck's Constant.—Ed.

** The angular distance of a planet from its perihelion from the sun, which measures apparent irregularities in its movement.—Ed.

TRAPPED ON TITAN

(Concluded from page 85)

ape-like men were fifty yards from the creatures of Titan before they were noticed. Then they were in the midst of the spindle-legs, clawing, tearing!

Chadwick saw one vicious ape-man spring almost six feet from the floor to clutch at the waist of a Titanian. In the next moment the flailing arms of the monster beat down on the unprotected back of the half-human. But the aboriginal sank his long fangs into the Titanians chest, and the creature rolled to the floor—blue liquid oozing from the gaping wound.

Chadwick was looking for Naomi. Finally he saw her. Monk did too, and shouted in terror. "Naomi!"

But the Titanian was swifter than the guns of Monk or Chadwick, swifter than the death that was coming over him. The creature's tentacles flashed out, winding python-like about Naomi's waist, crushing in mercilessly.

When Chet and Monk got to Naomi's side, the Titanian was dead—his tentacles still wrapped around the waist of the crushed slim body. A crushed body from which no blood ran!

But Monk hadn't noticed this in his grief. He dropped to his knees, weeping hysterically, pillowing Naomi's raven-haloed head in his lap.

Chet had no time to think. He stood above Monk and the dying girl, pumping his rocket pistol with a fury born of blind rage. "Five hundred years . . . five hundred of them . . . centuries . . ." the words flashed over and over again in his brain.

Most of the Titanians were battling desperately with their former slaves. Chet grabbed Monk by the arm.

"Quick," he shouted. "To the passage. Get out while we can!"

"No," Monk snarled. "I'm staying. Naomi's gone. I'm gonna stay here until every one of those—are gone, too!"

There was nothing else for Chadwick to do. With a grunt, he brought his pistol butt down on his pal's head. He caught Monk's limp body as the little fellow sagged forward. Throwing him over his shoulder, Chadwick ran . . .

Once above ground, staggering under the weight of the limp body, Chadwick looked wildly about. There was no sign of Titanians. Those above ground were probably hastening below to aid their fellow-monsters in the battle against the half-humans. There would be no time for them to repair their own space liner. Chadwick struck out without hesitation for the ancient rocket ship he'd left less than an hour ago.

If it was preserved like everything else it'd still be in running order.

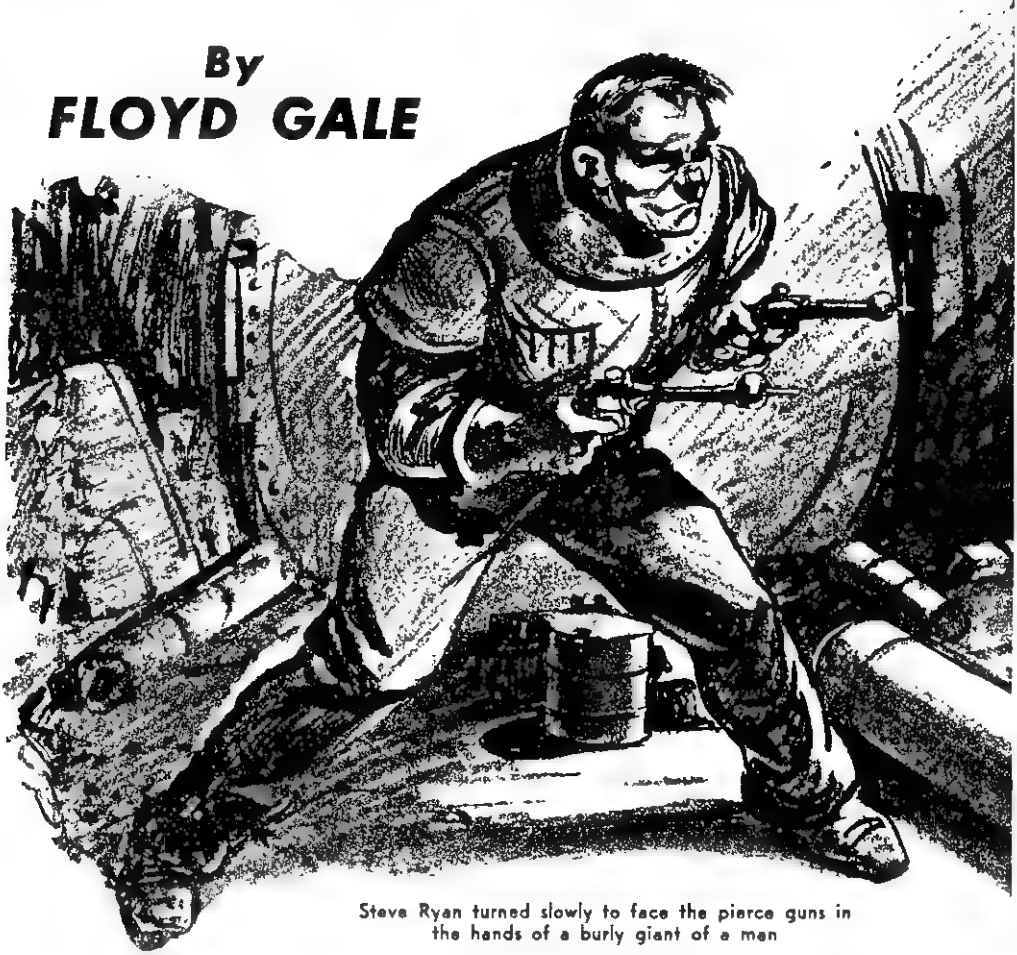
Some hours later, Chet Chadwick, at the controls of a spluttering antiquated rocket ship—a mere five hundred years old—looked down at the stirring form of his rotund companion. The bump he'd laid on Monk Sands' head was as big as an egg. Chadwick grinned.

"He's going to have a hard time forgetting Naomi," he said half-aloud. "Poor devil." But it'd be much better than knowing that Naomi had been worse than dead for five hundred years, only this screwy radium tainted world kept her in a false life. What would have happened if we'd gotten her away in space, away from the radiations . . . ? Chadwick shuddered and turned pale.

For a moment he was silent, his angular features bathed in reflection. "I know what I'll do," Chadwick said softly. "I'll let him have Olga back again! That'll make him forget, and what he don't know will never bust him!"

Treachery on PLANETOID

By
FLOYD GALE



Steve Ryan turned slowly to face the pierce guns in the hands of a burly giant of a man

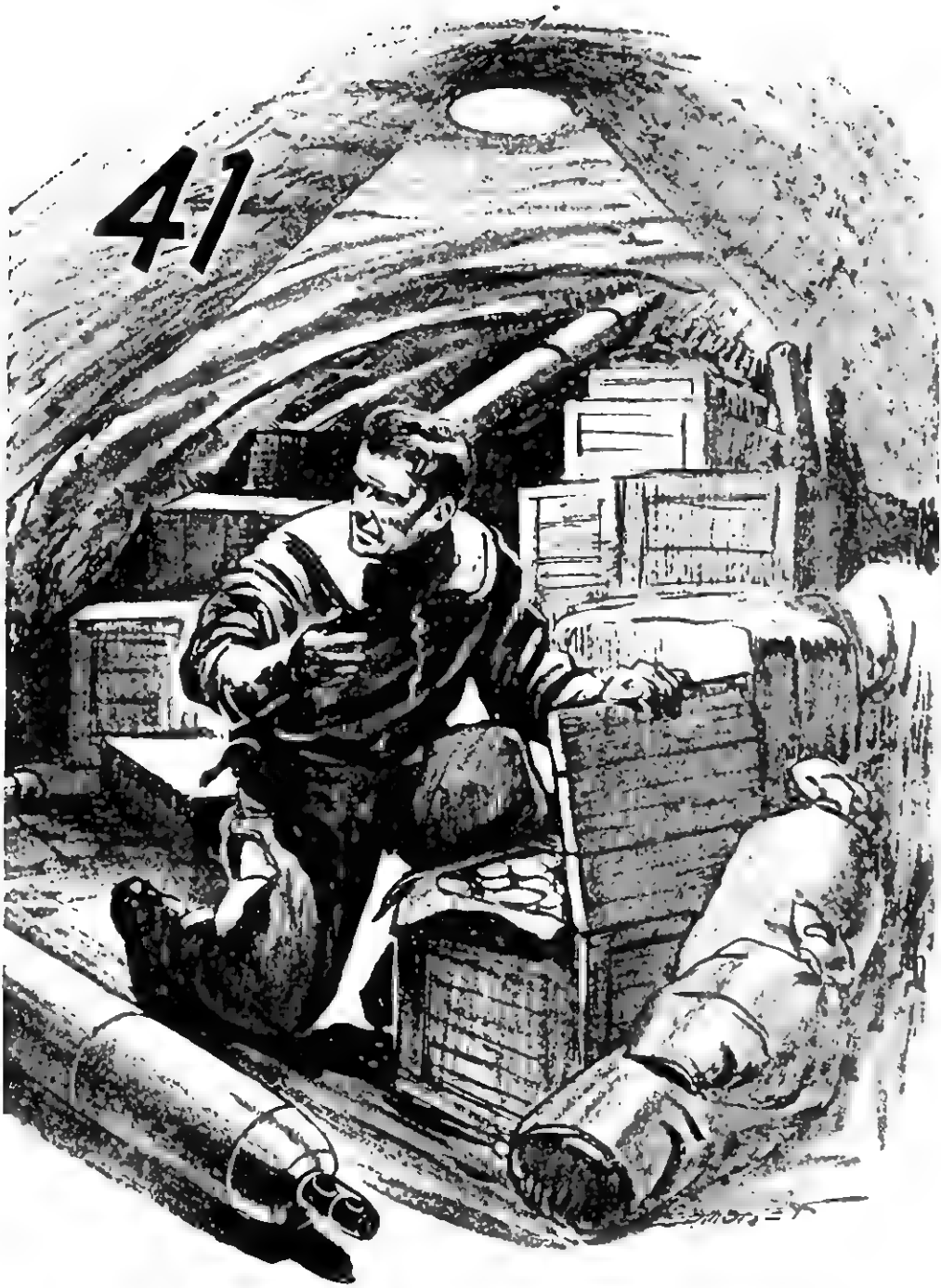
"IT can't work," Steve Ryan muttered thickly. "You're kidding yourself, Bart. The batteries are dying now. That's just ether crackle."

Bart Hall turned a haggard face away from Ryan, back to the etherphone speaker. Weakly, a thin voice trickled through.

"*Orion* answered *Sirius* survivors. We have your location. Check us. You are on planetoid 41, radius Sun-Uranus-Pluto, bisect Polaris."

Hall shouted suddenly, directly into the phone. "Right, *Orion!* When can you get here?"

"Our trajectory is . . ." The etherphone screamed horribly, its whine like the distant sound of a wind. Faintly the voice returned. " . . .thirty-eight



"Get off my planetoid!" a voice roared across the ether. But Ryan and Hall couldn't leave even if they wanted to . . .

days at the very least until . . ."

A tremendous blasting voice drowned out the distant, piping one

"Get the hell off my planetoid!"

The two men recoiled, stood dazed for a moment. They were weak with hunger, and in the blinding white light that poured through the pilot's vision screen their faces were as cold and stony-white as the landscape outside, a world of frozen carbonic acid.

"Get him!" Ryan barked. "That voice was close!"

Bart Hall fed the last of the precious juice into the batteries. Not even the whine and rasp of ether crackle answered. Hall shook his head glumly. "That voice blew the tube. The etherphone's dead—completely gone."

"Bart!" Ryan's voice was unsteady. "That voice was close, maybe a million miles from us. We've got to contact it."

Hall sank back in his pilot's chair. "No," he said, wearily. "It wasn't close. Just a powerful transmitter, probably around Mars. And he wasn't talking to us." His eyes went to the landscape outside. "We're alone now, Steve. The last two survivors of the space-wrecked *Sirius*. Seems a little funny now the way we worked so hard trying to get through to Jupiter in this old boat, slaving away for dear old Spaceways Freight, Inc."

"There's still the *Orion* coming," said Steve Ryan.

Hall shrugged and a wry, horrible grin twisted his lips. "They'll be a long time picking their way through the asteroid belts," he said slowly. "Thirty-eight days. What if they don't get here . . . in time?"

Ryan was silent. He rose and made the rounds of duty, as if the old *Sirius* were still plowing through the heavens. He drove all other thoughts from his tired mind; the men who had died when the meteorite hit; the men who had followed them in death when a space-whirl had sucked them off the hull of the battered ship as they lay to for repairs. All gone now, all dead.

Meticulously, Steve Ryan reduced the oxygen flow from a half to an eighth, checked the condensers gathering minute quantities of water from the ship's atmosphere, turned off the single dim bulb.

In darkness, then—once they left the glare of the vision screen they turned in.

FOR a long while Bart Hall lay wide awake. He knew he should have tried to fall asleep, for that would use up less oxygen. His brain was swelling, pressing viciously against his eyeballs. The air began to smell foul. But two weeks on the asteroid had accustomed him to that.

The virile, booming command to get off somebody's planetoid dominated his mind. Working on low oxygen rations, he couldn't organize his thoughts. Suddenly, though, one burning fact blazed through the muddle.

He sprang to the floor in his bare feet, took huge bounds through the short corridor to Steve Ryan's room.

"Steve!" he shouted. "They said thirty-eight days! Do you know what that means?"

But Ryan's bunk was empty. Hall stared through the blackness, felt the flat bunk again, this time more carefully, as if Steve might be hiding. There was no question of it. Ryan had gone.

Hall felt his way back to the control room. He sat uneasily in the pilot's chair, staring at the blinding vision screen. Steve Ryan was nowhere in sight. There was nothing but the shadows, the glistening dry ice crystals, and above, in the velvet sky, faintly illuminated asteroid shapes tumbled

across the pinpoints of light.

Coldly now, Bart Hall's mind was working. He was remembering the stores, the inventory of the wrecked *Sirius*. The meteorite that had hit them had demolished most of the store-room. The supplies, food, oxygen, fuel, had gone whirling out into space. What little had remained after eight of the last ten survivors had been sucked to their deaths had been carefully hoarded. Only Reserve Officers Hall and Ryan were left—and that led to an inevitable conclusion.

On quarter rations of everything—one man might live the thirty-eight days before rescue could come. Two men would die of thirst or hunger or asphyxiation . . . in twenty days. . . .

"Death," Hall muttered to himself. "The real thing. It's coming now, after a short life." He shuddered, sitting there alone.

Hundreds of times, just for the thrill, Bart Hall had faced almost certain death. But he had always seen himself in the role of hero, never as a corpse. Now that it was stripped of its excitement and glamor, he saw himself dying in slow agony, without a tangible enemy to face and fight—saw himself as a strangled cadaver, a tortured, inert body. And that vision paralyzed him with fright.

"One of us has to go," he said aloud.

With clinical detachment, though, he weighed his reasons for living against Ryan's. Hall was a brilliant mathematician, with an unfortunate craving for adventure. When he got all the bubbling energy out of his system, he fully intended devoting his life to man's search for knowledge. Ryan's death would be meaningless to humanity.

"I'm not wrong," Hall said, getting up determinedly. "A committee of scientists would decide the same way. When that meteor struck us amidships, I felt every bit of adventure slide right out of my blood. From now on I don't care if I never see a space ship even in the newscasts."

He knew the supplies would give away an ordinary murder. Three months of wandering in space, two weeks on the planetoid, almost six more weeks before rescue. . . .

They'd dissect Ryan's corpse. . . .

No simple killing would do. This had to be foolproof—absolutely foolproof, yet convincingly natural. The Space courts had no sympathy for shipwreck murders.

Hall strode across the tiny control cabin, to the small galley. His lean, hungry face was cold and white, his eyes grim. When he hid a sharp icepick under his pillow and turned back to the cabin, nobody would have recognized this frigidly ruthless killer as Bart Hall, the laughing daredevil of the spaceways.

* * *

One moment the vision screen showed nothing but the savagely bright crags of the planetoid. The next instant, Hall saw Ryan's inflated figure bound high over the horizon and leap swiftly toward the life-boat.

Hall's face was composed, and he was busily preparing the pathetic single meal of the day when the outer door of the air-lock slid open and hissed shut. From the corner of his eye he watched the wheel of the inner door revolve slowly. He heard the four bolts grate back. Steve Ryan entered.

Ryan's mouth was pale and thin as he removed the space suit and hung it on the hook. Just as deliberately, he checked the oxygen tank between the shoulders and closed the valve.

There was something else that had to be explained, Hall realized. There was only one space suit aboard. All the others had been lost when the captain

had gone out with the crew to repair the smashed hull. Hall fervently hoped he could explain the one legitimate fact in his plan.

Sitting across the little galley table, Ryan broke the silence.

"The *Orion's* 'Sparks' said thirty-eight days, didn't he?"

Hall covered his start. "Yeah. Why?"

"We can't make it, Bart. The stores won't hold out."

"Sure they will," Hall replied confidently. "We'll try, anyhow."

Ryan shook his head. "We won't make it. It's you or me."

"What makes you think so?"

"The *Orion* said it'd get here in either thirty-eight days at the very most or very least. Our supplies can't last that long."

"We'd have a lot better chance if you didn't take the space suit out every day," Bart Hall suddenly flared. "What in hell're you doing out there?"

"I can't tell you yet," Ryan said, halting at the alleyway to his cabin. "But that doesn't matter much. One of us has to go, Bart. . . ."

For long moments, Bart Hall sat alertly facing the alleyway after Ryan left to turn in. His suspicious mind saw menace in Ryan's last words. One of them had to go . . . The fool! If Ryan was planning murder, why was he telegraphing the information?

Quietly, then Bart Hall went back to his own room, and from there to the control cabin. When he returned to his bunk, he made his eyes stay open, though the foul air drugged his mind and tortured his lungs. He had hidden the long stilletto-like blade that he had found. His heavy eyes were fixed on the dark alleyway all night, waiting for Steve Ryan to come out—to take the space suit and go.

But when he climbed down and looked in the other room, it was empty. He must have fallen asleep, partially asphyxiated by the vitiated air. And during that time, Steve Ryan had risen, taken his usual small breakfast, and gone out on the asteroid for one of his mysterious walks.

STEVE RYAN shuffled over the airless surface of the planetoid. Little clouds of sparkling carbonic acid crystals puffed high at very step, and took a long time to settle back in the asteroid's weak gravity.

He had left the tiny space ship far over the horizon. Now, off to his left, a chain of sharp crags rose from the torn, tortured plain. The glassy rock caught and reflected the weak light from the distant yellow Sun. Ryan shuffled out of black shadow, into the blinding glare, back to the shadow.

Then Ryan turned to the right, shuffled through a narrow, deep ravine like a jet scar on the brilliant plain, his eyes ever searching. In his hands he held a little colored instrument, and his gaze flickered to it now and again.

"I don't even know why I'm hesitating," he muttered. "There's no real choice. I haven't told him about this crazy hope of mine, because if it doesn't come true, the disappointment would be terrible. Once Bart Hall may have been irresponsible and erratic, but he certainly isn't now. The guy always was a mathematical genius, only he had that adventure bug inside him. But he's changed."

He came to the broadest, deepest part of the ravine. Where he stood, the ground was almost perfectly level for several hundred yards to each side. There the steep cliffs rose sheer toward the sky, pointing at the shadowy, upending asteroids out in space.

"The System has plenty of use for a guy like Hall," Ryan was thinking.

"And me? What the hell am I? Another reserve officer who doesn't know anything but rockets, and not much of them either. I can't even get a job on shore. All my life would mean would be to work until I saved up enough to retire on a few bucks a month."

Ryan stared at the curiously flattened crystal snow. "Oxygen might be in this," he muttered. From that his eyes traveled speculatively toward the cliffs at his left.

Footprints had tracked all over the right side of the ravine. But Ryan showed no interest in them, for they were his own. On the left side, the brilliant snow had been well trodden also, but at the far end of the cliff it was still virgin. Toward that part he began to shuffle.

"Yep," he concluded. "There's no argument. I'm the guy to go out in a strangling blaze of glory. If this last crazy hunch doesn't work out, I'm not going back to the ship."

But as he moved cautiously toward the end of the crevasse, he was beginning to gasp for breath.

"What's this?" he choked. "Should be enough oxygen for another two hours."

His lungs were laboring. The air in the suit grew more tenuous than ever. Now that he listened, he could hear the thin whistle of escaping oxygen.

Ryan stooped and examined the legs of his space suit. He had an idea of what he was going to find.

Near the strained material at the seams small, neat punctures had carefully been jabbed.

"The dirty rat!" he howled. "I was going to die for a sneaking coward like that! I'll get back to the ship and kill the scum. . . ."

But he knew there wasn't enough air for that. He gulped for breath so painfully that he had to turn up the valve. Hopping wildly to cover as much ground as possible, he kept his hands over the holes. Precious air leaked through his clumsily gloved fingers.

He almost screamed when he felt the punctures rip in long gashes under the pressure of escaping oxygen. As well as he could, he held the torn edges together and jumped in long leaps toward the cliff. His chest was heaving frantically. His legs felt powerless, and he knew that the tiny capillaries under his skin were rupturing.

At the smooth face of the rock wall he clawed his way along. When his fingers touched it, he could not believe his senses. He thought he was delirous. There was a faint flow coming through, moving the still crystals of snow—moving them as only oxygen might! The colored instrument in his hands was glowing now.

"I couldn't find it like this," he gasped. "It sounds like a gag. Nobody really finds salvation at the last minute. . . ."

BUT he had found the narrow, betraying slit in the polished obsidian cliff! With his fingers first, then with a belt knife, he pried madly at the slab. And it gave—it moved slightly from side to side!

Smoothly, suddenly, the slab came loose, fell gently to the ground. Ryan glared red-eyed at a metal air-lock door.

He was sure he had used his last breath of oxygen in tugging loose the slab. But he had another left to twirl the wheel and pull down the locking bars from their slots.

Without the slightest sound, the door swung open. Ryan staggered through, and for the first time he heard a *click* outside the air-lock. Until then he had not dared to breathe. But now he knew he was in an air-filled cavern. He

gulped and strangled until his lungs were full. Then he opened the inner lock.

A bulb in the roof switched on. Ryan gaped at a large cave—heaped with boxes, bales, crates, and bags.

With an inarticulate cry, he leaped at the pile, pawed through it until he came to food. He stuffed dried beef and fruits into his mouth. When the sharpest gnawing was gone, he looked about once more. He saw an electric stove, pots, silverware, plates.

More leisurely now, he set a huge stew boiling on the stove, and put up a pot of incredibly fragrant Martian coffee. He didn't mind the hours he had to wait for his meal to be ready. While waiting, he had examined every crate and box in the cavern.

"Hall, you filthy Venusian polecat," he grated. "You showed your yellow, all right. But you did worse than that. Here we've got plenty of oxygen tanks, food, water, batteries. And those big tanks over there are—fuel! But you, you damned coward, had to punch holes in our only space suit. So here I am, with everything we need to make us comfortable. There you are, rationing everything until the *Orion* gets here. And probably neither of us'll be rescued! Oh, you dirty plague rat! I'll kill you if I ever get my hands on you . . . which I guess I won't. . . ."

Ryan left the dishes still piled high with food he could not eat. Standing directly under the light in the ceiling, he examined his tortured legs. Mere capillary ruptures should not have caused him the agony he was feeling.

"Now what the hell?" he mumbled. "Where'd I pick up raw, red blotches like that? And, boy, do they hurt!"

He gaped around blankly for something to apply. The pain in his legs, though, prevented him from walking from case to case and searching. He was patting the burns, holding his hands gently over them to keep off the tormenting air. A metallic click startled him. Ryan swung around.

A space-suited giant stood at the closed air-lock, a gamma-gun in each huge hand. Ryan flushed, for the enormous man contemptuously put the gun back in his belt and began to remove his suit. When the newcomer stood clad in green shorts and jersey, Ryan shrank back in awe.

The giant's wide shoulders and bull neck rose to a powerful, brick-red face and head that looked odd under the shaggy gray hair.

"Thought I told you to get the hell off my planetoid," the other said in a quietly savage roar.

Steve Ryan recoiled from the modulated blast of sound.

"I can't. I've been space-wrecked."

The gray-haired giant stooped, picked up Ryan's suit and examined it.

"Don't they tell you fledglings to stay away from sharp rocks?"

Ryan said something that was drowned in the boom of the organ voice.

"I don't know where in hell they breed you young fumblers. Hell, you can pair off a couple of Saturnian jackapes and they'll do better! Crack up out in space, tear your suit like a schoolboy—and now you come busting in on my planetoid, not only trespassing but stealing too!"

RYAN'S protest rose high and shrill above the deep roar.

"I wasn't stealing. I was hungry and out of oxygen. And those rips were made deliberately."

"Are you a screwball?" The old giant peered at him searchingly. "What'd you do it for?"

"My shipmate did it," Steve Ryan said bitterly. "Our supplies can't hold

out until the rescue ship comes, so he tried to fix my wagon."

When the giant grinned broadly, his strong, white teeth gleamed with incredible attractiveness in his brightly reddened face.

"Well, I can't kick. When I need supplies, I just up and take them. If I can't pay for them, I don't." Shaking his gray head despondently, he passed his keen eyes over Ryan's physique. "You kids ain't the same race us old spacemen used to be. You're the skinniest, puniest rascal I've seen in two generations, and it looks like there's no stop to it. Every generation seems to be getting punier than the last. Look at those legs. Can't dodge the law on Jupiter with soda straws like those."

Ryan could make no protest to this ancient dogma. But he did look down in embarrassment when the old giant bent forward, his shrewd gaze narrowing in astonishment.

"Where'd you get those raw, puffy burns?" the giant bellowed.

"I don't know. Outside, I guess. Do they look so bad?"

Without replying, the old man went directly to a case, felt around a moment, and returned with a jar of ointment.

"Here. Rub this on your skinny shanks."

The tormenting sting left almost instantly, and the red blisters shrank visibly. But now that his pain was gone, Steve Ryan pondered the identity of this mysterious old giant rover of the spaceways. The huge face haunted him with a sense of familiarity. He was sure he hadn't seen it recently. It seemed more like a face out of his childhood.

"Who are you?" Ryan blurted at last.

The giant stepped close and lowered his face, like the craggy features of an approaching planet, within inches of Ryan's.

"Ever hear of Pegleg Sam Brooks?" the enormous voice boomed out.

The mystery was instantly clear to Ryan. Pegleg Sam had become a favorite hero in children's books after his record was cleared by his—

Ryan gaped. "He died on Pluto! The Planet Police were tracking down all pirates and they cornered . . ."

The old giant's humorous eyes turned fierce and blazing.

"I ought to break you in half for that!" he bellowed. "Nobody but a runt ever called me a pirate twice. Sure, when I can't pay for supplies, I pick them up wherever I can. That ain't piracy. And I never killed anybody who didn't draw first, even if the cops say otherwise. That's on the level, shrimp. I'm touchy about my ideals."

Ryan stood indecisively during the long, strained silence while Pegleg Sam Brooks ate a brief meal and zippered himself into his suit. Then Steve Ryan watched the old giant as he limped vigorously to the air-lock.

You're not going to leave me here?"

"Why not?" The old pirate's vast hand closed around Ryan's arm and held him off. Get this straight. You're the only one in the System who knows Pegleg Sam Brooks is still alive. I'll get rid of you without letting you eat yourself to death."

Ryan fell back under the gentle shove, and the heavy metal door closed behind the giant.

Steve Ryan sank down on a box. Rescue had been so near. There was no space suit in the cavern, of course, so he couldn't escape. And the old man's brutal strength could easily crush him if he fought.

The door opened again. Ryan sprang to his feet. His thin hands balled into fists as he leaped forward.

"HALL, you filthy skunk!" he shouted.

The old giant stood grinning at the air-lock door, huge gauntleted hands on his hips, his enormous legs braced wide. And before him cowered Bart Hall.

Despite his rage, Steve Ryan felt like laughing. Lost in a space suit a head too high for him, Hall peered over the collar at the bottom of the transparent globe.

Ryan pummeled the air-cushioned suit. The blows didn't bother Hall, for he raised his clumsy arms and hastily unscrewed the helmet.

"Cut it out, you fool!" he whispered.

"I'll kill you, you damned murderer!"

The giant leaned against a tall crate, grinning at the absurd stalemate. Ryan couldn't hurt Hall, and Hall couldn't defend himself in his tentlike suit.

"Stop it," Bart Hall hissed under his breath. "That's Pegleg Sam Brooks. He's going to kill us so we can't talk. . . ."

"I'm going to kill *you!*" Ryan yelled. "Get out of that suit!"

He snatched a box high over his head, aimed it at Hall.

"None of that," the old man roared, knocking it out of his hands. "There ain't goin' to be any fighting for a while, and when it does come, it's going to be fair fighting or none at all. That's the way I fought, and that's how it'll be."

Unwillingly, watching Ryan, Bart Hall began to climb out of the space armor. But he made so slow a job of it that Ryan unzippered the suit and hauled him out. Then he stepped back to allow Hall to lift his fists.

Suddenly he felt Pegleg Sam's great hand against his chest. He was powerless against his captor. "Break it up," the giant boomed disappointedly. "Though I'm achin' for a good scrap to watch." He looked at Ryan. "I don't blame you for wantin' to flatten him. I'd kill any shipmate who pulled a low trick like puncturing my space suit."

But then he turned to Hall, and his bright grin was wide.

"I guess I'd do just what you did, though. When a guy's back is to the wall, that's no time for sentiment, is it? All in all, the two of you acted according to your lights, and I'm going to let you settle your differences later—"

"Later?" Hall yelped. "But you said—"

"I said you were the only ones who knew about me," the giant roared cheerfully. "But later, if you talk, the Planet Police'll have three guys to track down. For aiding and abetting a pirate." Get it?"

"You're going to *force* us into piracy with you," said Ryan, staring.

"WHO said anything about piracy?" the pirate bellowed in rage. He grabbed Hall's jersey and forced him to face Steve Ryan. "You're supposed to be a scientist, you skinny shrimp. What do those burns on his legs look like?"

"Why—I'm a mathematician—they look like plain burns. . . ."

"Plain burns—on a frozen planetoid!" the old giant roared. "Where in hell did he get them?"

He spread his huge arms and slapped them gently on their backs.

"Ever hear of *radiialloy?*" *

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* The metal refered to here is probably a misnomer, or a layman's definition of an isotope of radium. However, it is impossible that an alloy exist in a natural state with any definite properties, except by sheer accident, nor would it be a consistently proportioned alloy that would allow such a thing as a definite name for it. The properties of different forms of radium are still mysterious, and the metal refered to here as an alloy undoubtedly does exist in small proportions in widely scattered parts of the solar system. What its reaction on human flesh might be is problematical, but it is reasonable to assume that a new gas, akin to argon, might be created by the action of this radio-active metal.—Ed.

"You mean," Ryan said incredulously, "that new metal element that was discovered a decade ago? It's worth fortunes—but . . ."

"Ah-hah!" Pegleg Sam Brooks burst out. "So it hit you, finally, did it? The rays got through the ripped space-suit. So you know why I can't let you two just die of starvation, or bury your bodies?" He paused thoughtfully. "Not that it won't work out this way. There's enough *radiialloy* buried in the frozen wastes of this planetoid to make all us stinking rich. I don't like to show my face around spaceports because the cops might remember something, though I could take the chance. So, when we get rid of the pesky *Orion*, one of you cubs can take my space ship, sell some of this stuff and bring back a Doc to do the neatest job of plastic surgery on nine worlds. Then old Sam Brooks can step out again as an honest man."

"That's wonderful!" Steve Ryan burst out. "When the *Orion* comes—"

"I don't get this," Bart Hall faltered, interrupting. "If what you say is true, why can't you just kill us? Then you *could* go to some spaceport, call from inside your ship and get the Doctor that way? We'd make that easier, but not easy enough for you to spare our lives, and split a fortune three ways."

"Ho-ho-ho," the old pirate bellowed. "So you're the scientist! Ever hear that *radiialloy*, when it oxidizes, or combines with, any organic substance, forms a gas? And that a gas can be traced on a planetoid this size where there's no atmosphere, but gravity enough to hold any gas?"

Bart Hall stood confused. "I don't understand," he mumbled.

Steve Ryan burst out impatiently. "Listen, rat, what would the *Orion* do when it got here and found us dead with this burn? They'd know there was *radiialloy* here. And if they found no trace of us, they'd make autopsy tests, atmosphere tests. Then they'd certainly find that infinitesimal trace of gas that the *radiialloy* formed when it burned us—because it had oxidized with that organic substance that was our flesh. And they'd know there was *radiialloy* that way!"

"Oh," said Hall. "But now we can just tell the *Orion*, when it comes, that before etherophone went dead, we'd contacted other help and we're staying here to wait, and there's no danger."

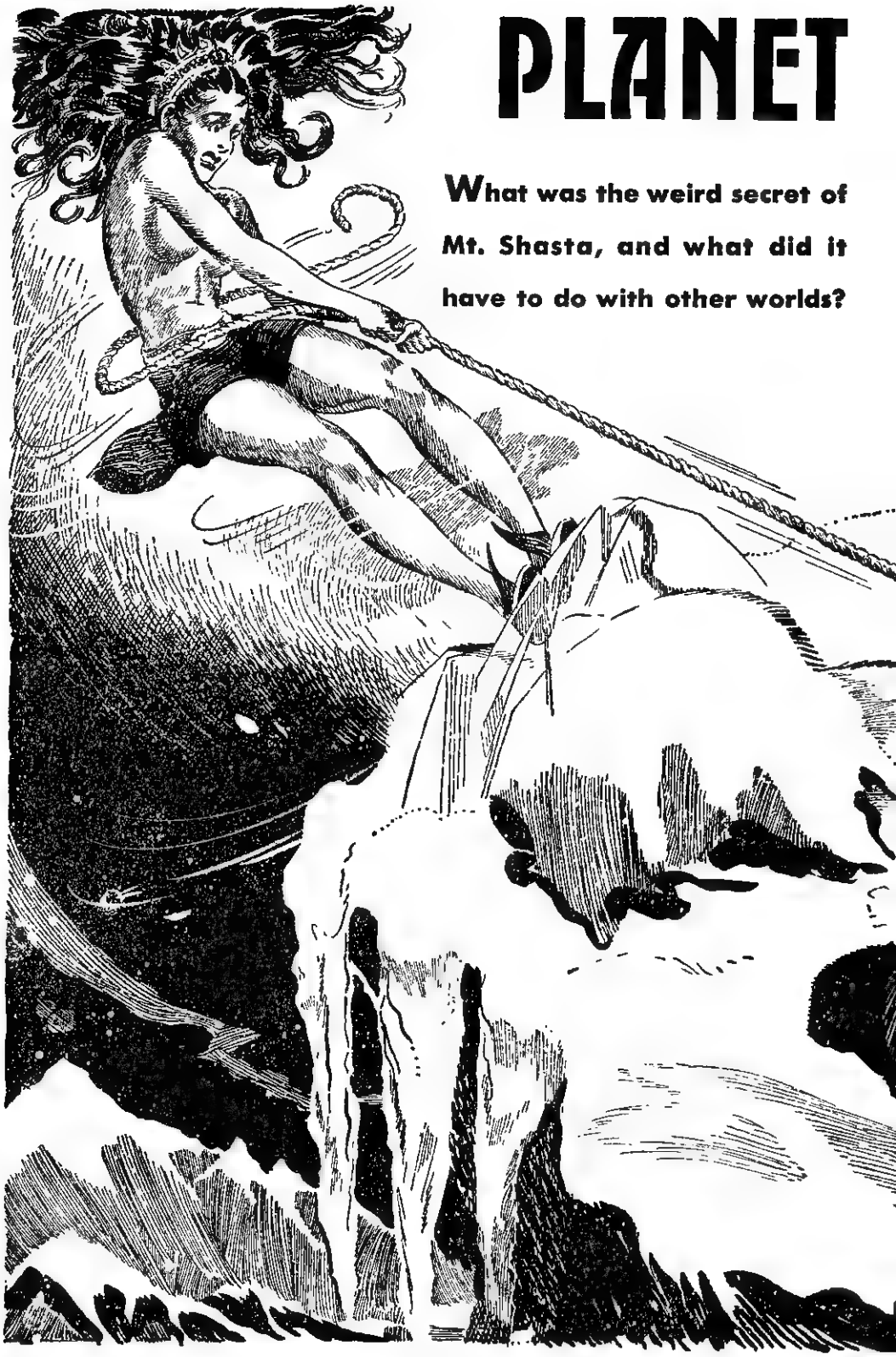
"Right!" said Ryan.

"But even then—one of us would be enough," Hall said quietly. "Pegleg could kill one of us, save the other to throw the *Orion* off, then use him to bring the Doctor back, and kill both him and the Doctor."

Even Steve Ryan was silent now. Pegleg Sam Brooks regarded them sourly. "How could I be sure that that one was coming back?" he demanded. There was no answer. "Only if I sent Ryan here. I know *he'd* come back because he aims to give you the beating of your life, and he wants you alive. Meanwhile he can be sure I don't kill him later because when he goes to Jupiter, he can leave the whole story in a sealed envelope, not to be opened unless he *doesn't* come back."

A slow smile spread over Steve Ryan's face. "Gee," he said. "That's pretty complicated thinking, when you come down to it. Everything taken care of—why you can't kill us, how we help you—and how I get a crack at that rat—and make money in the end."

The old pirate regarded them both. "Meanwhile, we're all partners, and you still haven't seen why it happened. Ryan, you sentimental idiot, shake hands with this murderous snake. If he hadn't punctured your suit so you could get burned, I'd have killed you both sometime today."



PLANET

What was the weird secret of Mt. Shasta, and what did it have to do with other worlds?

# of BLACK TERROR

by ED EARL REPP

FOR a couple of hours after the rescue expedition had deserted him, Clark Erick was too angry to notice the increasing difficulty of the trail. Gradually he discovered he was proceeding with mounting slowness. Rocks strewed the path and gaps yawned in it at intervals.

The fog had thickened. Gales blasted against the mountain and tried to tear him from the insecure footing he clung to. It was cold, with a savage chill that froze his face and would have frozen him to the bone, had it not been for his thermo-suit.

Once there was a rift in the mist, and Erick saw Mt. Shasta's summit, unbelievably near. With new hope warming him, he struggled ahead. He climbed fast, ascending the steep path at the

Between Clark Erick and death was only a strand of rope and a slim, exotic girl.

rate of a hundred feet every ten minutes. He was climbing too fast for safety when, at a steep turn, he slipped on a loose rock and pitched forward on his face.

The shock stunned the young scientist. He lay still a moment, warm blood trickling from a cut in his cheek. The thing that finally aroused him was an all-enveloping coldness that cut through his thermo-suit like a knife. His fall had ruined the thermal mechanism!

There was nothing between him and icy death now but a thin sheeting of copper alloy and cotton!

Erick found himself stumbling to his feet. A shudder convulsed his body. The wind battered him back against the wall, and for a moment he thought he should freeze there before the will to live asserted itself.

To go back the way he had come was his first thought. That idea perished in the stern control Clark Erick clamped on himself. Stiff fingers went to the task of extracting the thermal mechanism from the little holder at his breast. It was stubborn work, but at last he was holding a little bakelite box in his shaking hand.

The box was broken. Opening it, he found the tiny power system ruined beyond repair. A scornful twist curved his lips. That was how they made things in these days of America's decadent Second Republic.

It was none too soon when Erick decided to forge ahead. His legs were cramped. His lungs gasped at the cold air in thin, spasmodic wheezes. There was just one hope that he might last beyond a few minutes.

Up ahead, a mile or so, there should be a scoria ridge of loose volcanic stone. Out of those stones he could build himself a hut. If he could find wood, he had matches for a fire.

"I can make it!" Erick told himself. "I've got to make it!"

Panic surging through him, he went ahead at a stumbling pace.

Yet for long minutes the volcanic rock did not show up. Skidding, falling, crawling on, the freezing scientist rushed through the storm. He had long passed the section where he had expected to make his stand.

What had happened to the rocky deposits the map said were there?

Clark Erick was never to find out. For as he staggered ahead, the fog suddenly fell behind him. In another moment he was bathed in warm sunlight, with a bright blue sky over his head!

In the next instant he was scrambling aside, as he realized his headlong plunge had carried him squarely into a crevasse in the ice!

Shoe-cleats squealing, Erick himself let out a startled yell. Then he was sliding feet first into a gleaming blue slot. He shot down too fast to be conscious of fear. He remembered thinking:

"This is better than freezing, sliding down the chute to hell!"

THEN suddenly he was flung into the air by a rise. He came down spinning and rolling. He was on a sort of shelf, now. Death reached for him a second time, as he slipped halfway over the edge of it. He glimpsed a dizzy drop below him. Twisting, he managed to catch the edge by hands, elbows and chin and hang there. His long legs writhed over emptiness.

Clark Erick knew it would not be a long struggle. He was too weak to last more than a half minute in this ridiculous pose. His eyes tipped upward, up the long, smooth slide down which he had come. Incredulity sprang into them at what he saw.

Down the slide, flashing along like a white comet, came the figure of a girl!

Brown hair whipped behind her. She was coming straight toward the scientist, and for a moment the crazy idea of reaching up to save her entered Erick's head.

Before it quite left him, she had drawn her feet up under her. Ice screamed and white spray flew into Erick's face. Momentarily blinded, he suddenly felt a rope fall across his shoulders, tighten around him. The girl was standing there with sharp cleats dug in, straining back with all her might to draw Erick to safety.

The scientist's muscles stretched to the snapping point as he pulled himself up. But the feat was not impossible, and the incentive was there. Very soon he stood panting on solid ice. His eyes clung to the girl in open wonder.

A wealth of color gave richness to her face. Lips of a deep red, she had, with eyes a sort of violet and dark hair tinted with copper. And above her forehead, just where her hair was parted, a glowing ruby shone regally.

But unfriendliness was written in her face. She stepped back from Erick, and her words came rapidly.

To Erick they sounded like: "Kay tune stome eeha?"

"I'm sorry, lady," he faltered. "I guess we don't talk the same language."

"Oh, I forgot!" Unexpectedly, the slightly strange English sounds came from the girl's lips. "Of course, you do not speak Valgarian. What I said was —what do you mean by coming here?"

Clark Erick could not keep back the grin.

"Put it down to plain orneriness," he gave back. "Every time I see a crack in the ice, I find myself jumping in."

The strange girl's gaze searched over his face.

"You mean, you didn't k n o w about—"

She looked down into the mighty hole Clark Erick had nearly fallen into, the gesture seeming to finish her sentence. Erick looked—and went weak with amazement.

It was like peering through the eyepiece of a microscope and seeing a tiny city laid out on the slide. But those buildings below were not miniatures. They were symmetrical and delicately carved. Fluting, cornice and tracery, every ornamental device of the architect was there in profusion.

The buildings looked as fragile as those glass ships fashioned by glassblowers. In the ice-filtered sunlight, their arched roofs gleamed bright gold. The whole effect of it was to fill Erick with the notion that if he were to throw a stone into the miniature city, the entire structure would shatter and fall to a tinkling ruin.

When he looked back, the girl held an odd-looking device in her hands that was yet familiar enough, by its long snout, to send the scientist's hands high.

"You've got me, lady," he breathed. "But I swear I'm completely in the fog about this."

"You lie!" his captor snapped. "My father will know better what to do with you than I. March!"

Clark Erick began to sense the closing of a trap. Had John Hillyer fallen into this same, fantastic half-world? he asked himself. Was he, too, a prisoner in the hands of—well, of what? Of whom?

Five weeks ago John Hillyer, head of Science House, virtually a third chamber of Congress since establishment of the Second Republic some twenty years before, had crashed in his ship somewhere on Mt. Shasta.

IMMEDIATELY there had been consternation. Hillyer was the greatest scientist of his time—even the decaying Second Republic recognized t h a t.

America and the world at large had barely recovered from the effects of the catastrophic Second World War. If mankind was to be saved from its cynicism and growing restlessness, John Hillyer was the one man who could do the job.

All these thoughts flooded anew through Clark Erick's brain as he and this girl with the strange English accent proceeded rapidly along a vaulted staircase cut through solid ice and winding down like the stairs in a lighthouse. For all her beauty, the girl kept close to him and never let her gun waver. They came out presently into deserted streets.

Erick had his chance to inspect the city more closely as they passed through it. From this close view, it seemed even more a miniature. None of the structures was higher than two stories; generally, they were of a single story, with built-up spires and domes giving an effect of greater height. The conviction seized Erick that the entire city was a replica of some larger place. A model? He wondered, and a little thrill of excitement roused through him.

Beyond the city loomed another opening. As the girl directed him down the steps and through it, Clark Erick began to understand a little of what he was seeing.

The machine down there was a space ship, frozen into the ice.

There was no doubt of it in Erick's mind. Space travel, to men of Earth, was still a dream; a dream that was being forgotten by lazy-minded inventors of today. But wherever this monstrous silver bullet came from, its purpose could only be to cross the vast emptiness of space.

The upper half of the slender ship was free of the ice. There were evidences of the whole thing's having once being frozen solid and partially chopped out by painstaking labor. What that must have cost in human energy, Erick could only imagine. This glacial ice was like granite, and the ship—well conservatively, Erick surmised it was at least a quarter of a mile long. That meant a lot of chopping.

Several score men and women were visible, carrying supplies into open ports of the ship. It appeared to Erick as though a giant exodus was about to take place. And yet—looking overhead, he saw that a roof of ice a hundred feet thick blocked the ship from the air.

With puzzlement written deeply on his features, Erick was brought up to a small side entrance, away from the throngs, and marched inside.

He found himself on a catwalk. Below, workmen swarmed like ants, yet, confusion was absent. A sense of order and quiet prevaded the ship. Erick's pretty girl captor now opened a door and motioned him inside.

Strange exclamations burst on his ears. Three men came to their feet from where they had been seated at a long chart table. Pencils and drawing instruments fell from their fingers.

Erick heard more of that soft language the girl had first tried on him. Then again he was hearing English, the kind a mechanical voice box might produce.

"Why did you come here?"

The speaker had left the table to advance almost angrily on him. He was tall and emaciatedly thin. White clothing hung shroudlike from his body, glistening. Erick found his attention caught by the man's face. Full of lines and age, it was at once kindly and infinitely wise. He saw sadness in the deep brown eyes; pain etched the high forehead.

"Why have you come?" the question was stated again bluntly.

Erick was moved to tell the whole story.

"I am looking for a man named John Hillyer," he said quietly. "He crashed on this mountain over a month ago. The rescue expedition deserted me a few hours ago. I became lost in the storm and fell in here by accident. Is that a reason why I should be escorted about like a criminal?"

"No, of course not." The answer surprised Erick, but its effect was quickly offset. "The point, of course, is that you are undoubtedly lying. Earthlings do not have the truth in them."

"Earthlings!" frowned the young scientist. "You speak as though you were from some other world than this!"

"Another world? Indeed we are," replied the other softly. "But so long ago! Rhea, where did you find the man?"

"On the ledge above the city, father," the girl said. "He was falling to his death, and I—I saved him."

One of the other men bit out an angry word. It was obvious that her efforts had been worst than wasted, in his opinion.

"Be quiet, Mada," said the leader. "You did right, Rhea, my dear. He has done nothing worthy of death. Nor, indeed, will he have a chance to. Call one of the workmen and have him taken to a room. He will be allowed to remain there until we leave in the morning."

RHEA pouched her little pistol and touched a button set in the wall. Far off, a bell rang.

Erick's pulses rushed. "But—but wait a minute!" he protested. "After all, I was dying in the storm an hour ago, and now I escape from that to find myself in a world I never knew existed. Am I to learn nothing of yourselves, nor why you regard me as a savage?"

The wise man—Erick could not help thinking of him as that—shrugged.

"It can do no harm to tell you a little about us, I suppose. I am Deimos Valgarias, our name for one of the planets belonging to the greater planet you know as Jupiter. Ten years ago our space ship was caught by your planet's gravitational pull and drawn in.

"It was our bad luck to fall into a glacier, where we were frozen helplessly. During these years, we have fought the ice with every weapon we command. We carved this cavern and have made our temporary home here. In time—"

"But why did you stay up here, when we of Earth would have helped you?"

"Helped? Or imprisoned, robbed, murdered!"

Rhea flung the words at him like hot coals. A slow flush of shame dyed his neck and ears.

"We—we aren't so bad as you think," Erick protested, knowing in his heart that the chances would have been ten to one that the very things Rhea feared would have happened.

"If that is all you want to know—" Deimos suggested, as a workman appeared in the door.

"No, it's not all!" The whole reason for his being here sprang up afresh in Erick's mind. "I came here to find a man who is highly important to our civilization. More so than you can realize. You must have seen him when he crashed. The spot is known to be near here."

Deimos gestured to the burly workman.

"We saw nothing of him. You will go to your room, now, where you must stay until tomorrow. Then you will be given food and warm clothing and released. Any effort to escape will mean your death. Aros, take him to one of the empty rooms."

Clark Erick made no resistance. But

his mind was alive with a raw tingling.

The Valgarians had started, unconsciously, when he mentioned Hillyer! Or was it merely his own overwrought nerves?

Securely locked in a tiny bedroom, he had ample time to dwell on these thoughts.

It was almost incomprehensible to him that this ship in which he was held a prisoner had come all the way from Jupiter. But equally puzzling was the strange aversion of the Valgarians to men of Earth. Ten years of hiding here in a glacier!

Erick was startled from his somber reverie by a sense of something being wrong.

A strange awareness stole through him as he sat bolt upright on the hard bunk. His eyes roved over every detail of the room. The girders crossing the ceiling looked prosaic enough. The wall stanchions, the little round porthole, the neat dressing table—all were in perfect order. And yet—

It was simply a pair of footprints on the dusty floor that had aroused his suspicion. Common, ordinary prints, as of a pair of average-sized men's shoes, a triangle design in the heel. They weren't his own, because he had on hobnailed boots. And they weren't the Valgarian guard's, because that individual didn't wear any of earthly make!

What Earthman had been here before him? Erick asked himself. And suddenly he was sweating, because the answer was so obvious—and yet so maddening.

CHAPTER II

Escape Through Space

NIGHT came, finally, in a blaze of coruscating red and gold. When he judged that it was about nine o'clock, Clark Erick reached into a small flat holster inside his shirt and drew forth a small pistol. Failure of the Valgarians to search him, he had reasoned, was either an oversight or their mistaken belief that he could have no such weapon on him.

The lock on the door was incredibly ornate. Valgarian love for design and ornament extended even to delicacy in lock-building. Probably no key could pick it, but a bullet—

The little gun roared. The door swung outward a trifle. Erick sprang to the portal and stood listening.

But all went on as usual. Insulated walls deadened the noise. Down in the heart of the ship, men and women still worked on.

Erick stepped boldly into the passageway, gun shoved conveniently under his belt. He was too canny to make himself obvious by glancing this way and that. As though he were chief officer aboard the craft, he marched down the hall to the stairs. Casually he mounted to the fifth level, wondering whether the control rooms might not be located there.

A blade of light sliced from under the door of the chartroom where he had been interviewed by Deimos and his ministers. Erick stopped, hand closing on the butt of his gun.

Voices came to him as a soft murmur: a girl's; Deimos' grave tones. Then a voice spoke up that poured shock through him like ice water. *John Hillyer!*

Clark Erick went through the door at a bound. He slammed it clear back on its hinges and stood spread-legged in the portal, gun held low and steady.

Then: "Chief!" he gasped.

The lean, hawk-featured, graying man who sat with the Valgarians at the

chart table came to his feet. His face drained of blood. Swiftly, wrath sent it pumping back through his pale cheeks.

"Throw that gun down, you fool!" he roared. "Why didn't you do as you were told? This may mean your death!"

Erick's gun tumbled from his fingers. He could only stand and gape like a half-witted fool, while the head of Science House savagely scooped up the weapon and jammed it into his stomach.

"I—I couldn't sit around while they might be murdering you, Chief!" Erick got out at last. "I found one of your footprints in the dust of my room. That told me all I wanted to know."

"How did you get here?" Hillyer snapped.

Erick told him in breathless spurts of faltering words.

"And it's no thanks to those cowardly cohorts of mine," he finished grimly. "They ducked out as soon as the going got rough."

"You'd have done well to follow them yourself," Hillyer ground out.

Erick began to get hot under the collar now.

"If this is the appreciation I get for—"

Hillyer might not have heard him, for all his reaction.

"I don't know what the hell I'm going to do with you," he bit out. "If you think you are going to go scot-free and maybe bring back hordes of those greedy, grasping fools I'm unfortunate enough to be associated with—"

Suddenly Clark Erick was grinning.

"It does my heart good!" he chuckled. "You're the first man I've heard call the turn correctly on the so-called scientists of Science House. Since that's all that's worrying you, put down that gun, Chief. We're birds of a feather!"

Now the frown was on Hillyer's brow.

"I don't get it. You deny you're up here to scout the situation before capturing these people?"

SOMEHOW it came to Erick that the ring of sincerity was a sour note in his superior's voice. Yet he only said:

"You know why I'm here, Hillyer. I admit that it wouldn't be safe for the Valgarians to have their presence known. But my business here is with you."

Deimos abruptly placed a hand on Hillyer's arm.

"He speaks the truth," he said flatly. "Let him have his gun. We have nothing to fear from your friend."

"But the risk!" Hillyer protested, turning on him swiftly. "Ten years of hoping and working gone in one minute, if he betrays you."

Deimos spread his hands, smiling at Erick.

"He has had that gun ever since he came among us. Had he wished to use it in his own behalf, he might have at any time. Only fear for you made him produce it. Give it back to him, John."

Hillyer obeyed. Abruptly, he grinned and offered his subordinate his hand.

"Forgive me!" he said. "It was only that I've grown to love these people and the things they love. Work, progress, unselfishness—all the things Earth has forgotten. I couldn't trust anyone with their fate."

"I think I understand," Erick nodded soberly. "But tell me—why haven't you come back to us, or at least sent word?"

Hillyer's eyes were steadily on Erick. His chin went up a little, defiantly.

"Because I am never coming back," he said bluntly. "Earth is a shambles of the things I admired. There is nothing I want down there any longer. On

Valgaria, scientists are badly needed. I intend to spend the rest of my life among these people! I am sick and tired of trying to rescue a decadent civilization from itself!"

Erick frowned. "And Nan—you'd leave her, too?"

"Nan is a grown woman, able to take care of herself now. I've left her enough in securities and insurance. She has her own life to lead, and I know she'd never be happy away from Earth. Clark!" The scientist suddenly gripped his arm. "Why don't you come with us?"

The question rocked Clark Erick to his soul. It seemd so wildly fantastic, and yet— Life would be pleasant among these people.

Deimos and the others were smiling at him now, and he knew instinctively they would be the finest hosts a man could want to ease his way in a new world. Even Rhea, formerly so hostile, had a warm smile in her blue eyes now. But there was Nan to be considered—Nan Hillyer, whose marriage to him had been practically a foregone conclusion for as long as he could remember.

Erick shook his head. "It's not for me," he told them. "I'll stay on this crazy old earth a while longer. I'm going to bring some sense into it—or die trying."

"Well, as you wish." Hillyer did not press the issue. "I suppose you'll want to see the ship before you get some sleep. We're leaving at dawn, you know. This will be your only chance."

Erick's scientific interest pricked up.

"I wouldn't miss the chance!" he told them. "What runs the thing—rockets?"

Deimos chuckled. "Something like that. Rhea, will you show him around? We're making last minute changes in our course."

The girl accepted the keys he handed her. "I'd be glad to. If you'll come with me, Mr.—"

"Just Clark," the scientist grinned. And by her quick, personal smile, Nan Hillyer's stock took the first setback it had had in many a month.

They worked their way along the ship, Erick taking in everything his amazed eyes could discover. Rhea was a gracious hostess, with a ready answer to every question and a never-failing interest in his reactions.

"One thing puzzles me," Erick frowned, when they were nearing the engine rooms. "You speak perfect English, every one of you. How did you learn it?"

"We have radios," was the reply. "Picking up your stations, we were able in a short time to master the language. We learned English the same way we learned—well, about Earth's decadence. That was the thing that warned us not to ask the help we came millions of miles for."

ERICK'S jaw fell. Rhea continued sadly,

"Yes, it was no accident we came here. Our landing in a glacier and being trapped—that was the only mishap. But the trip was planned a year before we left. Clark, can you imagine what it would be like to be called from the bedside of one who was dying, one dearer to you than life itself—and then never to be able to return, to find out if the loved one survived?"

"It would be horrible," the young scientist nodded.

"It has been horrible for us. Two years before we left, a strange, black mold commenced to grow in a certain part of Valgaria. Nothing was done to stop it, at first. Then we discovered it had covered a hundred square miles while we dallied! When we took measures to arrest its growth, we found it was impossible."

Memory painted dark shadows under her eyes.

"First one city and then another was swallowed by the growth. Buried under it! Under a crawling, living black mass that ate everything in its way except stone and metal! Finally we knew we were at our wit's end. We planned a trip to Earth for help.

"Through telescopes, we have long known of life here. We landed, dug our way out, and took the precaution of building temporary shelters outside before asking aid. We wished to learn what we could of your people before we trusted them with our welfare."

Shame stole through Clark Erick.

"It's as well for you that you did," he admitted softly.

Rhea unlocked the massive metal door before them, motioned to her companion to shove it open. A vast chamber full of pipes, levers, valves and gauges met their gaze. The girl's eyes were shiny with moisture now.

"All these years of having the means of returning and yet being blocked here by ice!" she said bitterly. "Not knowing what was happening back on Valgaria. But we shall know soon."

A quick objection pinched a frown between the scientist's eyes.

"How do you intend to leave at dawn, if there is still a hundred-foot roof of ice above the ship?" he demanded. "Even the bottom half of the ship seemed to be frozen in."

"The roof is no problem. We can crack through that as you would drive an ice-pick through an eggshell. We deliberately left a narrow band of ice around the middle of the ship, to support it in the angle we wish to take off. But underneath this room where we are now, at the very stern of the *Astra*, we had to carve a mighty cavern for a firing chamber.

"Through the rocket tubes, we will fill that cavern for the initial blast to fire us into space. It was the building of that chamber that has taken so long. No doubt you saw the blue flashes of light that meant we were blasting, using our own rocket fluid for the work."

"Yes," Erick said tightly. "That was one of the reasons why the rescue expedition deserted me. Those weird flashes scared them."

Suddenly a red light began to wink on and off in the ceiling. Rhea stepped to the wall and pressed a signal button.

"Father is calling me," she said. "I'll leave you here to look around. Then you'd better go back to your room and rest. You must be out of the glacier when we leave."

A trifle sadly, Erick watched her small figure hurrying up the catwalk to the second level. Yes, it was true. In a matter of hours, he would have seen the last of these people for whom he already felt a deep attachment. But in the meantime—

He approached a battery of massive pipes and emerged from what resembled a gigantic carbureter. He supposed the pipes led to the various firing chambers. He had followed one of them down and was examining the valve at its end, when a footstep grated behind him.

Before he could turn, something descended like a falling star on his unprotected head. Amid a geyser of dizzy lights, he crumpled to the floor.

CHAPTER III

In the Rocket Tube

CHAOS and agony. Black dust getting in his eyes and mouth. And consciousness—

Consciousness that came like a blow to the jaw. Clark Erick sprang to his feet, to sprawl on his back immediately.

The floor was sloping, slippery, and covered with black dust that was like wax on a dance floor. There was an ache in his head that seemed to have a personality of its own, to be a very entity.

He got up more warily. It was gloomy twilight around him, except that ahead a round disk of light showed. Erick tried to walk up the incline to this opening, and failed. The slope sent him slewing wildly about instantly.

Why in hell was the floor so steep and polished? And what was the black fog drifting out through the aperture? For that matter, what was this stuff settling all over him? It was like waxy soot.

Anxiety struck at Clark Erick, but some inner wisdom caused him to force himself to stand there and think. His eyes roved about, telling him more each second as the dusk grew lighter to his dilated eyes.

Over his head was a jet from which poured the black soot. It came out as a heavy, syrupy-looking gas. Beyond the aperture, the great hole underneath the *Astra* was also filling with the stuff. Soot settled on everything he could see. Hm-m—whoever heard of filling a chamber whose floor and rear wall were of concave pattern with black soot? That is, why would such a thing be done, Erick asked himself, his heart beginning to pound, unless there was a very good reason for it?

Erick began to sweat. Could it be that this sooty black gas was—*explosive?* And then the whole picture came to him with agonizing clarity. He, Clark Erick, a reputable young scientist in a world of cynics and sycophants, was by grace of the devil a prisoner in the *firing chamber of a rocket ship!*

This syruplike soot was nothing more nor less than a highly combustible mixture which, when exploded, would drive the rocket ship far out into space. And as for Clark Erick—there would be nothing left of him other than a charred belt buckle, a half-melted gun, and perhaps a little white dust which had once been a pattern of human bones!

Sick with fear, Erick stood there stunned, trembling—until the sooty gas ceased to emerge from the nozzle. Clankings sounded overhead. My God—did that mean, Erick thought in anguish, that the take-off was now in readiness? He commenced to shout then, to bang on the floor until his knuckles were raw and bleeding.

But no one heard him. Everyone was too busy, too excited at the immediate prospect of release from Mt. Shasta which had held them helpless and immobile for a full decade.

Now Erick's terrified eyes discovered rungs which mounted the slippery wall. The rungs ended in an aperture near the carbureter jets. Perhaps—Erick's heart leaped painfully—perhaps those rungs were a ladder that workmen used in cleaning out the tubelike firing chamber! In that event, the opening must lead up to the engine room! So that was how he got down here. Somebody had slugged him and dumped him in, just as nice as you please.

Erick sprang for the ladder, went up it like a monkey. Without pausing, he charged right on into the opening. The door he eventually reached was locked, of course. Back in the tube, a sibilant hiss struck out through the silence. A tiny flame was visible—the detonation flame!

In a moment, Erick knew, it would become larger, sufficiently large to heat up a few molecules of the soot drifting about and set the whole mixture off. Then Erick's hand settled on a lever in the darkness. The lever to open the door at the head of this firing chamber, perhaps.

He twisted it. A fanlike door, similar to the shutter of a camera, began to close *below* him, at the mouth of the chamber. But not quite soon enough.

With an expansive roar, the charge went off!

FLAME blasted into the firing tube. The shutters were nearly closed and, closing completely, they nipped the detonation off like a scarlet bloom plucked from a bush. But the concussion had flung Erick against the door above his head.

Dizzy and sick, he fought for consciousness. The ship must be traveling now at a terrific rate. He hung by his hands to a rung of the ladder, feeling as though his joints were being yanked from their sockets.

The flames had nearly exhausted the air in the tube. Fumes nauseated the prisoner. He was aware, suddenly, that he was going to fall. The rung was getting hot, the whole tube had heated up unbearably.

Then the door over his head slid back and a grimy, startled face showed above the scientist.

"En saga toom!" the Valgarian gasped.

"I don't know," Erick choked. "But get—me—out!"

That was all he knew until Deimos and Rhea and John Hillyer woke him up several hours later. All of them looked white and frightened.

"You've had the narrowest escape a man could have," Hillyer growled. "What in the devil were you doing in there?"

"Drinking pink lemonade," Erick snapped. "Ask the fellow who slugged me and dumped me in!" And at their startled gasps: "Sure! You didn't think I'd do it on purpose? My curiosity stops just short of looking down gun barrels and crawling into rocket tubes."

Deimos clenched his fists. Erick could see by his blazing eyes that the leader of the Valgarians could be a ruthless master when he had to.

"Someone must pay for this!" the ruler swore.

Erick pulled the covers up around his neck.

"Someone will, if I get my fingers on him," he agreed grimly.

Then exhaustion had its way with him, and his eyes closed again in sleep.

Twelve hours later, he stood by Hillyer on the bridge, while Deimos' finger pointed to a planet about half the size of the moon, which now swam in space behind them.

"Half a million miles already, Clark," the Valgarian murmured. "I am afraid you are taking an enforced leave from the world of your choice. It will be four months before I can promise your return. And even then, I'd have to construct an individual rocket ship for your own use."

Erick was seeing a girl's face where the others saw a small, shining globe.

Despondency lay heavily within him. In four months, Nan Hillyer, probably thinking him dead, might give her hand to another—

"Is it too late to go back?" he protested.

Deimos showed him a gauge in which a column of red was near the bottom.

"Our fuel," he explained. "We've used so much in blasting that we can barely reach Jupiter, now. I am sorry, Clark. But everything will be done to make you comfortable."

The luncheon chime tinkled, and Hillyer clapped him on the back.

"Come along," he chuckled. "Food will do a lot to ease that empty feeling. Joining us, Deimos?"

"Later. We're nearing a meteor swarm, and I must be at the controls

until it's passed."

So the two went out alone, and passed along the observation platform to the dining room. Hillyer sighed.

"Wonderful to think of this giant of space being pushed along by rockets," he marveled. "The power it must take! The Valgarians use atomic power. I suppose you knew that?"

"No, I didn't. What's the secret, sir?"

Hillyer stopped to light a cigarette. "I haven't found that out yet. But of course I will, naturally. Ah—atomic power! Think how much that would mean to a scientist on Earth!" he exclaimed.

And then the head of Science House relaxed, shrugging.

"But Earth is decadent. The people of Earth, you know, really are not worth saving any more. Oh, things will go on for years yet, pretty much as they have been, and Nan will have fulfilled her lifespan before real chaos breaks out. No, I will be much happier on Valgaria, among people who trust and believe in me."

"That," said Clark Erick with an unfathomable light in his eyes, "is always a help."

CHAPTER IV

The Probability Curve

TWO weeks went by.

The *Astra* clove through the heavens like a silver shuttle speeding across a piece of blue velvet. Far larger than Earth, now, was a great globe in the foreports. Jupiter had metamorphosed from a pinpoint into a great silver dollar.

Clark Erick wandered through the ship, and gloominess was at his side. His thoughts were back on his own world—the world he had hated and was now beginning to conceive a vast homesickness for. Nan Hillyer was in his mind constantly. He missed her eager laugh, her sauciness, the touch of her hand. . . .

And so, as was perhaps natural, Erick's despondency took itself out in hatred for the person who had condemned him to this exile. He had checked over the list of possibilities a hundred times, and nothing seemed to make sense. Except that there was Mada, the chief Valgarian navigator under Deimos. Jealousy might have prompted such an attack, Erick supposed. Still—

As if taking substance from thin air, the form of the bald, ferret-eyed otherworldling appeared before him. He had opened the scientist's door and slipped in unnoticed.

"The Exarch would see you," he stated. That was Deimos' official title.

Erick eyed him a moment. "All right," he grunted. "Where is he?"

"In his study. He is waiting for you."

Erick laid down his book, sighing. Mada vanished as silently as he had come.

Deimos was in his study when the young scientist knocked, seated on a high stool before a work table. He gestured at a divan as the other entered. On a low table, coffee, cigarettes and a cup of native *janra* waited.

They sat down together. The talk was light, for the first few moments; small talk. Erick presently put down his empty cup.

"You had a reason for summoning me, Deimos," he pointed out.

"I had a reason, yes. You have seemed to grow more restless every day, Clark. You are pining for your own world?"

Erick nodded glumly. "And for a girl."

"I know. Yet you said you were—

disgusted, I think was your term—with this same world, not so long ago."

"Perhaps I was too strong in my contempt."

Deimos shook his wise old head.

"No, it was not that. I know more of your world than you think, Clark. For years I have studied it by the things I heard on the radio. It is fully as bad as you imagined—worse, I believe. But you hope to return, to help save it from chaos?"

"I'm going to spend my life trying."

"Then you will waste your life, my son. Earth, within a few years, will have slipped into a new Dark Ages. Believe me!"

"I can't believe that." Erick shook his head. "I'll make them listen to me!"

Deimos was drawing down a white screen on the far wall. From an aperture behind the divan, he uncovered a machine resembling a camera.

"I'm going to show you something that happened on Valgaria two thousand years ago," he said soberly. "Our civilization then was at the same point at which yours is now. A few tried to stop its headlong plunge. They were carried down by sheer force of numbers. They, too, perished in the cataclysm."

The room went dark. A white beam sliced the gloom. Erick half whispered:

"Is this a moving picture story, sir?"

"This is life!" the answer came in a sibilant hiss. "These films are salvaged from what corresponded to newsreels of the time. Archaeologists dug them up and—we have profited by what they showed us. Watch!"

IN the next half hour, Clark Erick saw things that outraged him, that disgusted him, that terrified him. The pictures were crude and jumpy. But they bore a dreadful likeness to what had been taking place on Earth little more than a generation before.

There had, apparently, been two factions claiming overlordship of Valgaria. One faction, living in the more barren portion, was a pinched, disgruntled people seething with restlessness. The other group, far more numerous, was a mirror of unequal social levels which existed with varying degrees of prosperity on a wealth of natural resources and fertile soil.

A bloody war for control of the planet's riches had broken out. The poorer faction had lost, in the end, but not before imposing terrific material damage on their enemies' factories and great buildings. There had come, at last, a sort of grudging peace, in which the *haves* gave up just enough to the *have-nots* to keep them above the subsistence level—but not contented.

Then, for the *haves,* there began a period of brief but hysterical ostentation among those who had been successful profiteers in the war just ended. Great pleasure palaces reared from the ground. Luxury abounded. Parties of amusement-seekers were everywhere. The very wealthy even saw to it that there were a host of holidays, so that the lower classes might immerse themselves in cheap and enervating carnivals.

At last, of course, the inevitable arrived like all four horsemen of the Apocalypse. With sloppy and infrequent attention to machines and crops, shortage of manufactured goods and famine leaped upon the erstwhile *haves* like maddened beasts. And to make matters worse, the former *have-nots,* knowing their ex-enemies disorganized and chaotic, chose this moment to strike for the natural resources the *haves* still controlled.

A second war ensued, but it was both an external and an internal shambles from the start. Men fought in the

streets over food; fought for every conceivable reason, and no reason at all. Women turned on one another, ripping clothing from each other's bodies to protect their own freezing forms.

In the final scene, the starved factions of Valgaria were reduced to eating even the rats and the dogs, animals themselves with scarcely any flesh on their shivering bones—

Utterly horrified and a little nauseated, Clark Erick sat stock-still on the divan when the picture ended. His bloodless lips parted to ask:

"Is that—the truth—Deimos?"

"The truth—the ghastly truth. And according to the Probability Curve, it is a faithful picture of what will be taking place on Earth in only a few years."

Erick got to his feet. "But—after all—probability isn't the unbending future," he faltered. "Someone—a dictator, maybe, or—or a committee of some sort—could defeat the Curve."

"Certainly—with the odds against their success being about as good as those against their chances of hitting the sun with a sling-shot. Possible—but almost ludicrously improbable."

He went to the door and opened it. "Good night, my son," he smiled. "I'm sorry if I've been rough. But I want you to know just where you stand in this matter."

"It's all right," Erick muttered. "Good night. I guess I know what you mean, all right."

So the young scientist went wearily off to bed. But he didn't sleep a wink the whole night through. . . .

HILLYER spent most of his time during the last two weeks of the trip in the engine room. He showed an increasing interest in the workings of the *Astra*. So absorbed did he become that he saw Erick only infrequently.

For days before they put into Valgaria, excitement stirred the passengers. Hour after hour, they crowded the ports, staring at the growing star dead ahead. Their world! Would it be one of death when they reached it—or had the black mold been conquered?

With unbelievable swiftness, they received their answer. Valgaria was there before them, one morning. Erick was never to forget it. He stood with Rhea and the leaders on the bridge as they slanted down over the little planet.

He never realized when he took the girl's hand, but suddenly he felt it go rigid under his fingers. Heard her choke, with a tug at his own heart:

"Father—the mold! It's covered everything—*the whole planet!*"

Erick stared down somberly at the dismal scene as the girl buried her head against his chest.

Over all in sight, thick, black mold lay in possession. Here and there the *Astra* cruised low over cities whose towers protruded from the horrid stuff. Mountain ranges looked like giant moles crawling under the stifling mantle. Those in the space ship were looking at a world that Death had claimed for its own. . . .

Deimos' sharp eyes were first to see the change.

"Wait!" he cried. "It's getting thinner on the horizon. I can see a city, a clear space—"

Soon they knew it was true. A space about three hundred miles long and half as wide had been kept clear. That clearing was now one vast city. Probably every living soul on the planet was inside that teaming settlement.

By the flares and lights that sprang up in the twilight, the space voyagers knew they had been sighted. The ship arced down toward a rooftop landing field. Deimos seemed to know where he was going, though it was a maze of

spires and gables to the Earthmen.

It seemed that every man, woman the child in Rodan, the last of Valgaria's great cities, was on the field when the ship came to rest. They were clawing at the long-lost voyagers, carrying them away on their shoulders to the Hall of Justice. John Hillyer and Clark Erick themselves were accorded the same welcome. The hubbub didn't begin to subside until the leaders had all been placed on a platform in the middle of the ruling chamber in the august Justice Building.

Deimos gave a little talk in Valgarian. He told very simply what had happened. Then Erick and Hillyer were being introduced to the assembly, and their presence explained.

One of the men who had been on the field to greet them, an Imperator in the ruling chamber, raised his voice in welcome. Deimos interpreted for him.

"They want to give you a banquet before you leave," he smiled at Erick. "We can outfit you with a smaller ship as soon as you like. But tonight you must let them have their way."

"Tell them I am honored," the scientist responded.

But he was a little awed, too.

CHAPTER V

Ship of Fate

THERE was a ghost at the banquet that night. The black mold.

It edged with disappointment every attempt at gaiety. Its shadow was apparent in the poor quality of the synthetic food; little could be grown within the city itself. The setting took on the aspect of a convict's last feast before execution.

And Erick— Sitting there toying with his food, he let his mind puzzle over the mystery of the black mold.

Where had he seen the stuff before? For he *had* seen it; no doubt about that. Thick, fungous, self-propagating, its likeness lurked in a corner of his mind.

Then suddenly he knew! With an involuntary shout, he was on his feet.

Deimos was giving a speech at the time. The Valgarians started at the apparition of the Earthman standing at his place, shouting and waving for attention. Deimos looked a little vexed.

But Erick's words soon had the Exarch trembling with eagerness, too.

"That mold, Deimos—I remember it now! In the firing chamber that day! The gas coming from the carbureter changed to black, sooty stuff the minute it hit the air. *That's* what's killing Valgaria—rocket gas!"

Everyone at the banquet gasped, incredulous. Then Erick was hurrying down the speaker's table toward Deimos.

"Listen!" he exclaimed excitedly, grabbing the ruler by the arm. "Where do you get this rocket fuel of yours?"

"They tell me they can't get it any more," came the frowning reply. "All that is left is in storage tanks. It is made by combining two liquids that we obtain much as you drill for oil, but there were only a few wells of each when we left here ten years ago. *Arton*, one of the elements, we secured at a spot about a thousand miles from here. *Binar* was obtained not far from this city. We mixed them in hermetically sealed tanks for safety's sake. On contact with the air, they formed a dangerous mixture."

"And what did this 'dangerous mixture' look like?" Erick demanded eagerly.

"Why, it was a thick, gray powder —"

"Not gray—*black!* The trouble is, you mixed it in such small quantities

in the lab that you never recognized it in the mass. But that very stuff is what has covered your planet!"

The Valgarians were stirring now, asking each other questions that no one was able to answer.

"What are you saying?" Rhea breathed. She had been sitting next to her father.

Erick's face was triumphant.

"I was trying to explain," he said, "that these volatile liquids, *Arton* and *Binar*, have an affinity for each other just like oxygen and hydrogen. Put them together, and there's going to be a new product formed automatically—water and a residue of oxygen. What has happened is this: You people didn't cap your wells thoroughly enough. Or maybe there are leaks elsewhere.

"Anyway, the two substances attracted each other in the atmosphere. What happened? Black mold began to settle over the districts near the wells. The stuff got thicker in the air. The mold fell at other places. You began to neglect the wells, maybe when they were swallowed by mold. Then the stuff went hog wild. What you've got now is a world covered with explosive rocket mixture!"

DEIMOS was at last able to take him by the arm and steer him away. The Exarch called back over his shoulder:

"Mada, Hillyer, Inan—come along. We must hear more about this!"

In the small room where they gathered a moment later, there were desks and chairs. Deimos installed Erick in a chair where he could address all at once.

"Now let's have more about this," the ruler directed.

Erick repeated his findings. "That's about all, gentlemen," he concluded. "Oh, yes! I just remembered that this same black mold settled over the inside of the firing chamber of the *Astra*. Now tell me this—what's the individual chemical composition of these liquids?"

From his vast fund of knowledge, Deimos was able to draw complicated organic formulae. Erick jotted them all down. The Valgarian chief watched him scowl over the figures.

"You think we can defeat this plague, my son?" he queried tensely.

"I'm afraid not," Erick replied. "Impossible to get at the wells to cap them now. But there may be another way."

Hillyer spoke up now. "Do you know what you're doing, Erick? That is to say, this is a damnably serious business."

Erick laid down his pencil impatiently.

"Of course I know. I've got it down right here in black and white, now. Deimos, this may prove to be the best thing that's ever happened to Valgaria!"

"Explain, then," Hillyer said.

"Look." Erick handed Deimos a sheet of calculations. "The compounds which produce combustion in the fuel—call it the black mold, if you like. The chief element is a powerful nitrogen fertilizer. Another is water. The other main one is carbon."

"But I still don't see—"

"I propose that we set fire to this stuff!" Erick exclaimed. "Yes, I mean the whole planet! Ignite this mold at some spot and let it burn itself out. When it's gone, there won't be an atom of life left outside of Rodan, if there is now. But there'll be something better—a rain that may last for weeks, result of the formation of water. In a few months, Valgaria will be the greenest of them all!"

"No, I can't believe it!" the Exarch muttered. "The risk—for all we know the fire might cremate us all."

"It's either that or die under the mold!" Erick protested. "Give me *carte blanche* in this, Deimos. All I ask is a week to get everything ready. Say the word and Valgaria may be saved."

Deimos bowed his head, nodding slowly. "If it's the only way," he muttered. "You have my permission."

* * *

CLARK ERICK had asked for a week. He was ready in four days. With every living soul in Rodan below ground, he took off one morning in a small, fast space ship. Dangling just below it was an incendiary bomb.

It was a taut moment when Erick put the craft in a dive toward the ground, a few miles from the city. He realized all at once how much his new friends meant to him. Earth all seemed like a dream. This was what mattered now!

The incendiary bomb burrowed into the black mold even as he tipped the rocket car sharply up. Utter silence for a moment. Then an explosion that hurled the little ship end over end like a leaf in a gale. Dizzy and sick, Clark Erick saw scarlet flames leaping from the earth every time the ship rolled over on its back. Rodan was buried under masses of black clouds and tongues of fire.

An hour later the flames had marched out of sight over the far horizon. The smoke had resolved itself into heavy storm clouds that massed over Erick's little ship menacingly. White ashes overlay everything. A storm of tropical fury was raging over the city when Erick set the ship down again.

Deimos met him at the landing roof. He bore the welcome tidings that not a single soul had so much as been injured.

"Well, we can only wait now," Clark Erick told the ruler. "Wait and see if life can spring again from the ashes."

THREE weeks sufficed to prove the young Earth scientist right. Over the entire planet, a carpet of faint green sprang up!

Valgarians began a general exodus from Rodan. All the deserted cities were cleaned of the last vestiges of the black mold, and life commenced to take on its age-old pattern. The wells from which the mold had come were capped and made proof against ever getting out of hand again.

Once more Erick's thoughts turned back to Earth. But there was increasing restlessness within him. The days went on, and he continued to delay his departure, pretending unending last-minute preparations.

John Hillyer came to his room one night. Erick was really packing, at last, and the scientist stood for a while and watched him.

"You know, I never congratulated you on the splendid job you did here," he said quietly.

Erick smiled. "I was lucky," he said. "Anyone who spent the time I did in the rocket chamber would have thought of it."

"I'm not so sure," Hillyer said. "My only regret is that I didn't take care of this sooner—"

There was something in the great scientist's tone that made Clark Erick turn his head. In the next moment, he came swiftly to his feet.

"Hillyer, you fool!" he roared.

Hillyer kept the gun he had produced steadily on Erick's chest.

"Keep your voice down or I'll kill you," he snapped. "I just came to tell you that you aren't going back—not now, anyway. I've got my things in the ship Deimos has ready and I'm leaving right now!"

"Are you insane?" Erick hissed.

"Crazy enough to let you get away with too much. But I'm not a complete

fool. You never believed my story about wanting to save Valgaria. I came along for just one purpose—to get the secret of atomic power! I've got it, now, and I'm going back!"

Erick's face worked. Fury darkened his skin, narrowed eyes to blazing bits.

"Then it was you that slugged me that day!" he bit out.

"It wasn't that old fool Deimos," Hillyer snapped sarcastically. "Ah, yes, my fine-feathered friend, you've been a monkey wrench in my plans for altogether too long. First I slugged you and dumped you in the rocket chamber because I knew that if you made the trip, sooner or later you'd bawl up my well-laid scheme.

"But luck was against me that time," he smiled cynically. "You managed to escape alive. Luck was against me a second time when you discovered what was causing the mold. You see, I intended to let it smother everything; then leave for Earth in the *Astra* at the last moment.

"Leave for Earth," he repeated almost reverently, "with the secret of atomic power in my grasp! Dr. John Hillyer—the greatest scientist alive! Think of the power that would be mine —no, that still *will* be mine! I shall be the most powerful single individual alive!"

"That," Clark Erick snarled, his lips writhing back on clenched teeth, "is the greatest overstatement of your whole career!"

Even as he finished speaking, the young scientist had launched himself in a flat dive. Hillyer swore viciously and fired twice, the slugs going high. But as Erick's arms closed like a trap about him, he chopped viciously at the other's bare head. Erick fell back, and again the scientist fired. This time Erick lay in a quiet huddle at his feet.

Swiftly Hillyer pocketed the gun. He swore at the unconscious form, then darted swiftly out the door and up the stairs to the roof-top landing field.

* * *

CONSCIOUSNESS came back to Clark Erick on a wave of pain. How long he had been out, he had no way of knowing. Staggering to his feet, he reeled out into the hall. The stairs almost stopped him, but somehow he made it to the top. Then he saw the renegade scientist!

John Hillyer was climbing into the ship. At Erick's shout, he spun on his heel. Again the pistol cracked, and lead drove into the roof at Erick's feet. The younger man halted then, knowing it was futile to go ahead.

The door of the space ship slammed. Lights sprang on inside the craft. A moment later, flames mushroomed out around the flat base. With a roar, the scout ship was gone into the sky.

Someone ran from the doorway nearby. Rhea stopped as she saw the ship flaring across the sky. Then she saw Erick and rushed to his side.

Deimos came from the door at the same moment. Father and daughter exclaimed over the scientist's wounds, but Erick's thoughts were all on Hillyer.

"Lord! Why did I let him get away!" he groaned. "It means trouble, Deimos. He'll be back with hordes of invaders as soon as they can duplicate your ships and fuel. He'll make out a story that you kidnaped him, and return for vengeance! He doesn't want another soul to know the secret of atomic power."

"No, he won't be back." Deimos smiled sadly. "He'll never even reach Earth, Clark. The ship hadn't been fueled yet. It will probably use up its reserve fuel tank long before it passes Jupiter."

THERE was a conference after Clark Erick's wounds had been bound up.

"My son," Deimos said fondly, "there is not enough that we could ever do to fully express our gratitude. You are, in all truth, the savior of Valgaria!"

Erick blushed like a schoolboy as members of the High Council of Valgaria, sitting about the conference table, applauded like Earthmen at a baseball game.

"You—you were wonderful!" whispered Rhea, next to the young scientist.

"Do—do you really think so?" Erick asked softly, and there was the light of a new wonder in his eyes.

"I can have another ship ready for you in the morning, my son," Deimos was saying. "I am sure you are well enough to travel, or so the doctor has reported."

"Huh? Oh, leave—" Erick said, starting.

"Oh, no!" Rhea burst out, and then colored. "No, Clark, I—I won't let you go!" she stammered.

A wise smile stole over the face of Deimos, and it was reflected in the amused, tolerant grins of the Council members.

"You do not have to leave—" Deimos began.

"Oh, but I must! I mean— Well," Clark Erick said stoutly, "I started out to rescue John Hillyer because he alone, so it was thought, could rescue America and the world from their present plight. I failed, in a manner of speaking. Now I must return myself, to make my report. If only—if only—"

"Yes, my son," Deimos nodded sagely. "The secret of atomic power—if that is what you need to preserve your civilization from decay, then the secret is yours for the asking. But you will have to remain here for a brief while, until you thoroughly understand the process."

Erick was flustered and triumphant by turns.

"Thank you, good people all," he managed. "If the population of my world may yet be saved at this late hour, then I must at least make the effort. But—" he blushed furiously— "then I shall return, to claim the hand of—"

"Clark Erick," Rhea said pointedly, her face a study in feminine determination, "you're going to marry me *before* you leave this planet! And you're going to take me with you to your Earth. And—and you're going to return to Valgaria with me, too! If you think I'm going to leave you to the tender mercies of that Nan Hillyer—"

THE MATHEMATICAL KID

(Concluded from page 98)

then I ran away, and I hid in an alley, and waited until your cabin boy came along, and then I hit him over the head with a sandbag, because I had to get his—"

OLD SCRATCH lost his grin. He purpled.

"You hit him over the head so you could get his job?" he yelped. "So *that* was why—"

Suddenly he began to laugh. He got so he couldn't stop himself. He began to laugh tears out of his eyes.

"He hit him over the head!" he yelled. "So help me, if that ain't the funniest—"

About that time I grabbed hold of the skipper and dragged him toward an automobile.

"Come on! We got to get off this off-center planet before you get that way, too!"

I never did like that other cabin boy anyway. No brains. Know what I mean?

Science Quiz

The following quiz has been prepared as a pleasant means of testing your knowledge of things scientific and pseudo-scientific. We offer it solely for the pleasure it gives you and with the hope that it will provide you with many bits of information that will help you to enjoy the stories in this magazine. If you rate 50% correct in your answers, you are considerably ahead of the average. Give yourself 3⅓ points for each correct answer.

A MATTER OF CHOICE

1. The change undergone in form from egg to adult, as in insects, is called: (1) incubation, (2) metamorphosis, (3) pseudopodium, (4) adaption.

2. The interval between similar solar eclipses is, approximately: (1) 7 years, (2) 23 years, 6 days, (3) 18 years, 10-11 days, (4) 5 years, 16-17 days.

3. When the sun is at its vernal equinox it is said to be: (1) spring, (2) summer, (3) winter, (4) autumn.

4. A camel can be likened to a human being because they also get: (1) flat feet, (2) hangovers, (3) dandruff, (4) halitosis.

5. If you want to put a crocodile to sleep: (1) shine a blue light into its eyes, (2) wave a colored cloth before it, (3) rub softly on its stomach, (4) raise the temperature to about 85 degrees.

6. Ammonia gas was first discovered by: (1) the pyramids of Egypt, (2) the Nile river, (3) the Temple Amon where decaying refuse gave off the gas, (4) the Indians who first found a natural supply.

7. T.N.T. stands for: (1) trinitrotoluene, (2) thorium nitrate, (3) toxic nitrous thallium, (4) titanoxite.

8. Women would be a little hesitant if they knew that lipstick gets its color from: (1) a dried plant louse of Mexico, (2) the refuse of a mollusk in Asia Minor, (3) the scales of certain animals found in Africa, (4) a species of Brazilian spider.

9. One of the uses of Strontium compounds is: (1) to make plaster, (2) to whitewash houses, (3) to make red fire, (4) as a medicine.

10. The International Date Line is situated, for the greater part, along: (1) longitude 85 degrees, (2) longitude 60 degrees, (3) longitude 0 degrees, (4) longitude 180 degrees.

11. Students of Eugenics use, as an example of study, the life history of the: (1) Jones family, (2) Smith family, (3) Kallikak family, (4) Johnson family.

12. Quinine is obtained from the bark of the: (1) eucalyptus tree, (2) cinchora tree, (3) balsam tree, (4) aspen tree.

13. One of the following is a non-metallic element. It is: (1) barium, (2) antimony, (3) osmium, (4) phosphorus.

14. Dry-ice is frozen: (1) carbon monoxide, (2) hydrogen sulphide, (3) ammonia, (4) carbon dioxide.

15. The sponge is the: (1) skeleton, (2) feet, (3) brain, (4) refuse of an undersea animal.

WHO IS HE?

In the next statements the word "he" denotes a scientist's name. Can you guess who he is from the facts given?

1—He discovered the principles of heredity and also published a book concerning them, called "Origin of Species."

2—He discovered the principle of magnetic induction parallel circuit.

3—He is probably remembered for his conception of the idea that white light is a composition of different colors. He is also famous for his gravitational experiments.

4—He is best known for his law concerning the transmission of pressure in fluids.

5—He upset the old phlogiston theory of combustion. He was killed by revolutionists during an uprising in the country.

MATCH THESE!

( )	1—360	A—Absolute zero.
( )	2—3 1416	B—Melting point of lead.
( )	3—328.1	C—Approximate number of bones in the body.
( )	4—-273.1	D—Length of nautical mile.
( )	5—32.5	E—Approximate diameter of the earth.
( )	6—8.6	F—Speed of falling body after first second. (Feet per second)
( )	7—200	G—Cotangent of 90 degrees.
( )	8—32	H—Temperature of the human body.
( )	9—90	I—Number of teeth in adult mouth.
( )	10—327	J—Number of degrees in a circle.
( )	11—6080	K—Pi.
( )	12—33	L—Number of vertebrae in the spine.
( )	13—98.6	M—Distance of star Sirius in light years.
( )	14—7918	N—Degrees in a right angle.
( )	15—Infinity	O—Atomic weight of uranium.

(Answers on page 142)

Meet the Authors

FESTUS PRAGNELL Author of

WARLORDS OF MARS

MY effort, GHOST OF MARS, was so well received that I thought readers might like to hear more about Don Hargreaves and the underground civilization of Mars. If there is life on Mars it seems to me that it must be underground, and as the sun cools in the distant future perhaps our own race will have to retire underground also if it is to live on.

The idea of a sunless, cavernous world fascinates me. There would be no day, it would be always night. There would be no summer or winter: weather would be always the same. Nothing would change. The first necessity of life would be light. There would be always the danger of falls of rocks from cavern roofs, and perhaps there would be many small side caverns, too small for humans to enter, and from these might issue dangerous reptiles to attack men

I first opened my eyes on this quarrelsome world on January 16th, 1905, which makes me 33 years old. My interest in Science Fiction dates from when I was nine years old, and read First Men on the Moon and others of Wells' stories in some bound volumes of old English magazines. When I was twelve I won a prize for a series of essays based on a course of lectures on Electricity and Magnetism.

As I write, we in Britain are waging a futile war. I feel that if the aristocratic caste that rules Britain had shown less greed and more intelligence in the past there might have been no Nazis and no war Did Britain ever really try to run the League of Nations, started by President Wilson, honestly? Under the weird voting system Britain supported every state had one vote. One to Britain, one to Canada, one to South Africa, one to Australia, one to new Zealand, one to India, one to the U. S. A. Six votes to the British Empire and one to the U. S. A. On a basis of white population the U. S. A. was entitled to at least two votes to the British Empire's one. America would not stand for it. If Britain would not play fair America would not play at all. Everything followed from that. The strength of the league was gone. Japan, then Italy, then Germany, and now Russia found they could defy this sham world government at will

With these feelings in my mind I made Mars a world ruled by aristocrats, against whom an ambitious man revolts. And I brought in another idea of mine, the idea that men fight one another because their adrenal glands are too large. Our glands control our characters, especially the adrenal and thyroid glands. Men with large adrenals partake of the nature of tigers, the most ferocious creatures known to man. When we can regulate these unruly glands we shall have peace. There will be no more John Dillingers, no more Hitlers. —*Festus Pragnell.*

ROSS ROCKLYNNE Author of

THE MATHEMATICAL KID

I WAS born Feb. 21, 1913. I was like other boys —I played cops and robbers. And Charles R. Tanner tells me that I still have that simple, cops and robbers personality—as evidenced by my Colbie-Deverel stories. But I don't believe a word of it.

Move upward twelve years from 1913, then, and you see me entering boys' boarding school, staying there five years, gleaning from this establishment nothing that would have made me any worse than I am now. Along about this period, I was reading Tom Swift, the Rover Boys, the Bible, etc., and, being too impressionable, I took the morals in these stories too seriously, and frowned down upon smoking, drinking, breaking rules, talking back to mother, neglecting one's duty to one's country, etc. Fortunately, I have learned better now, and try to place everything in its true aspect—I try not to be too deadly serious about anything. But I still have trouble confusing fiction with real life.

So that's all about me in the years gone by, save that I did some stuff for a high school monthly, batting out stories and even jokes, would you believe it. I've done some traveling around in this immediate neighborhood, Indianapolis, Clarksburg, Detroit, and down around Kentucky. But I'd like to travel. I'd like to go to the World Science Fiction Convention in Chicago this year.

I'm interested in most of the sciences, but have only a more or less complete knowledge of physics, because all the laws seem to hang so closely together. I like fantasy, of which science-fiction is apparently a branch. I like Erle Stanley Gardner. I read all the fantasy magazines I can.

My ambitions run toward five hundred thousand dollars, with which I shall give many people I know a chance to do what they've always wanted to do, and no buts about it.

So here I am, still in the middle of my story, for I'm only twenty-five years old. The story goes on, and will continue on, and every once in awhile you'll run across another of my stories, and I hope (vainly) that you'll like them all. But here's a quotation that applies to me, to the human race, and also to George Bernard Shaw who originated it: "I'm doing the best I can at my age." *Ross Rocklynne, Cincinnati, Ohio.*

QUESTIONS and ANSWERS

This department will be conducted each month as a source of information for our readers. Address your letters to Question and Answer Department. AMAZING STORIES, 608 S. Dearborn St., Chicago, Ill.

Q. In Amazing Stories for January, 1940, I saw absolute zero given as 459.6 degrees below the Fahrenheit zero, and 273.1 below the Centigrade zero. In another magazine I noted that the dark side of Mercury had a temperature of 480 degrees below zero, although it was not specified as to whether this was Fahrenheit or Centigrade. Which is right? Has Mercury a temperature of below the absolute zero mark, or are you wrong in your figures?—A. E. Maxwell, 648 S. Main Street, Opelousas, La.

A. Absolute zero is equivalent to —273 degrees Centigrade, which is the figure set by Lord Kelvin in his scale. This is an approximate, and the exact figure, of course, is a mystery. It may be 273.1, as you say, and if you take this figure, just one of the many that have been arrived at, you will be sufficiently right to warrant faith in your own argument. A temperature of less than 273 degrees below zero Centigrade is hard to conceive since a perfect gas contracts in volume 1/273rd with each degree below zero, and all molecular motion would cease at that point, and theoretically, further chilling would be impossible. However there is room for argument here, and there is no positive proof that lower temperatures do not exist.

* * *

Q. Is there such a word as degravitate?—Peter Retep, c/o George Raybin, 1133 Boston Road, New York, N. Y.

A. No, there is no such word, if you are asking about the dictionary of Noah Webster, but it has been used for years in science fiction stories. It means simply to apply an opposite force to gravity, and thus reverse its effect. To degravitate you reduce the gravity attraction, and cause an object to become lighter, and thus, to fly away from the earth rather than toward it. It might also be construed to mean "falling upward."

* * *

Q. Since the space between the planets, including the earth, is such a perfect vacuum, why is it that our atmosphere isn't sucked off into space, as certainly the attraction power of such a vacuum should easily overcome effects of gravity.—Ross Maurer, Box 164, Cadillac, Michigan.

A. You are assuming something that is false to be true. A vacuum does not "suck." It has no attraction power. Thus, it could not, by any stretch of imagination, draw the atmosphere away from the earth or any other planet. A vacuum on earth, *inside* the atmosphere, seems to "suck" because it has all around it a pressure, at sea level, of 16 pounds per square inch The vacuum does not "draw" the air into it, but on the contrary the air itself "pushes" into the vacant space. The atmosphere of a smaller planet, such as the moon, or Mercury, dissipates in this manner into space, because the gravity of a small world is too little to keep the molecules of air from escaping. The atoms of an atmosphere, were it to be released in space, away from a planet, would float away from each other, through lack of cohesive attraction due to gravity. But they would not be "sucked" away by any means. This also reveals the 15-year-old fallacy of science fiction concerning the instant "rushing out" of the atmosphere of a ship in space pierced by a meteorite. In reality, such a leak would be alarming, but it would be far from fatal, and a patch could easily be effected, with a piece of thin metal capable of withstanding 16 pounds pressure.

* * *

Q. Could a reader supply an "answer" to your questions and answers department, rather than a question? In your April issue, a reader asked about death rays. I am enclosing an answer that you might care to reproduce for the information of the reader who asked about them.—Eric Rolaff, Moon Valley Farm, Flat, Mo.

A. Dr. Antonio Longoria, of Cleveland, Ohio, has claimed to be the inventor of a "death ray" which has instantly killed pigeons on the wing, four miles away from his machine. He recently announced that he had deliberately destroyed the machine for the good of humanity. According to Dr. Longoria, he stumbled on the secret as a result of high-frequency experimentation on cancer. The ray is reputedly painless. Its action results in a change in the blood, much as light changes silver salts in photographic processes The ray was used before a group of scientists who witnessed the death of rats, mice, and rabbits. This was accomplished even when the animals were protected by an enclosure of thick metal.

(Editorial note: Thanks, Mr. Rolaff, for your "answer" to our question. But whether or not the death ray is an actuality, is still not positive. This story has not been substantiated as yet.)

* * *

Q. What is the diameter of Europa?—A. L. Minter, Rockford, Illinois.

A. Europa, one of the four major satellites of the planet Jupiter, has a diameter of 1,865 miles, which is slightly more than half that of Earth's own moon, Luna. It is a rather small world.

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DISCUSSIONS

AMAZING STORIES will publish in each issue a selection of letters from readers. Everybody is welcome to contribute. Bouquets and brick-bats will have an equal chance. Inter-reader correspondence and controversy will be encouraged through this department. Get in with the gang and have your say.

A RADIO MAN REFUTES PENWING

Sirs:

In reference to the argument aroused by the "Strange Voyage of Dr. Penwing," I'd like to put a few words in that seem to definitely squash the theory of a concave world.

In view of the facts of high-frequency radio wave propagation and transmission there is little to support any other than the accepted theory of a globular earth, with we'uns on the outside.

The best known of these facts is that high frequency waves travel in a more or less straight line. Reflection is only possible under certain conditions, and is not the usual thing. It is therefore, an exception to the rule when one station, transmitting on a frequency of 60 megacycles or higher is heard by another station or listener who is below the horizon formed by the curvature of the earth's surface.

If the earth was formed as per Dr. Penwing, it would be perfectly possible to send these high frequency waves directly across the open center of the globe with more ease than to keep them from such a course.

I could advance a lot of other objections to this phony theory, but would have to invade fields that I am not so familiar with as the radio game. As a practicing Radio Amateur, I know my oats in radio, and feel more sure of myself on the subject than if I stuck the well knicked neck into the path of some one else's axe.

DONALD G. REED, W6LCH,
2454 Lyric Ave.,
Los Angeles, Calif.

P. S. I've worked up a perfectly swell plot of a science fiction story, but my technical writing hasn't given me much practice in "Humanizing" a story. How about suggesting an author in this part of the country with whom I could collaborate.

Here's still another angle on the Penwing story. I guess that phoney scientist had better crawl back into his hollow earth! But at that, he's succeeded in rooting out the liveliest bunch of letters in many a day. Which means Author Lewis has written us a successful yarn. Maybe he'll write one now about the outside of this screwloose world of Dr. Penwing.—Ed.

KRUPA—AND COMIC STRIPS!

Sirs:

I like Krupa's *new* style. I do believe he has finally emerged from the comic strip stage. This same applies to Fuqua, who, like Krupa, still insists on portraying only the action element of a story and clutters up the illustrations with people merely standing about looking aghast.

Examples in April issue of this waste of obvious talent are *all* those by these two artists except *The Case of the Murdered Savants* and the meteor striking the Falcon in second installment of *Black World.*

These two stories, by the way, were very good, the former a welcome return of Brutus Lloyd.

I like full page illustrations. Why not use more of these instead of the spread style? I like the long awaited and finally fulfilled wish of all your readers, that Morey and Paul might actually join the art staff of your magazine.

Why does a wonderful cover artist like Krupa never do a front cover? His numerous "backs" are superb, and his one insipid front was very disappointing. Give him more chances. McCauley is the best all-around artist you have so far His covers are magnificent. I like *two*-part serials only. This is your best idea yet

I like, Observatory, cartoons, back cover, the now greater variety of artists.

CHARLES HIDLEY,
New York, N Y.

No doubt Mr. Krupa will place the name of Hidley on his teeth-gnashing list. But thanks for the comment on his work. He reads all fan mail avidly, and if there's been improvement, it's because he regards the reader's opinions very highly. As for covers, what about the cover on this issue? It's a Krupa, and we think it's pretty good for a man who hasn't been slinging color around for very long.—Ed.

PRAISE AND CRITICISM

Sirs:

Before I start my criticism I would like to rate the stories in the April issue of A. S.

1—Black World (Part II, conclusion).
2—The Fish Men of Venus.
3—The Case of the Murdered Savants.
4—When the Ice Terror Came.
5—Revolt of the Ants.
6—War of the Scientists.

The April issue enters the fifteenth year of A. S. and you started off swell. The stories were great and you had Paul do an illustration for one of the stories. It might interest you to know that three out of your last four covers featured

someone with a pistol in hand or drawing it from a holster. Frank R Paul would not let this occur because he picks the right part of the story to illustrate So let's forget guns for awhile and feature more machines, spaceships or a reasonable looking monster such as depicted in the "Fish Men of Venus"

For the best in science-fiction, A. S. has lousy paper. I collect science fiction, but it is hard to preserve the paper because it is so delicate it actually falls apart sometimes. Many of your readers will vouch for that. I don't demand trimmed edges In fact I don't want them, but I do wish you would be more careful with the paper you use. The twenty cents we readers pay for it entitles us to better paper.

HAROLD G. SCHAEFFER,
1320 Fulton Ave.,
Bronx, New York.

We have a space ship cover coming, done by Leo Morey and Julian Krupa in collaboration. We know you'll like it. Also, with FANTASTIC ADVENTURES *gone small size, and generally changed in format, we are going to feature Paul back covers on* AMAZING *from time to time His paintings of other worlds will delight you. As for our paper quality, your editor, upon inspecting his own files, finds his volumes in good condition. There is a difference in paper from month to month, but apparently this is a condition that cannot be predicted, each lot of paper seeming to vary to a certain degree. -Ed.*

USED UP ITS QUOTA

Sirs:

Best stories in April A S. are, in order of preference. "Black World," "Revolt of the Ants," and "War of the Scientists."

The abrupt speeding up of the tempo of part two of "Black World" was not an improvement; quite the contrary Nevertheless, the story as a whole is very good.

Kaletsky's satire is clever and amusing

"War of the Scientists" is one of Fearn's best The absence of such terms as "Gravity Tripler," and other meaningless etymological inventions with which his work is usually filled, is probably due, in part at least, to the story policy which I, among others, have so frequently maligned. Well, there is some good in everything I suppose

"When the Ice Terror Came," is O.K. I didn't case much for "Fish Men of Venus" or "The Case of the Murdered Savants"

I think the "Monthly Merit Award" plan had about used up its quota of usefulness

Yours Sincerely,
D B. THOMPSON,
Lincoln, Nebr.

Your comment on the Merit Award discontinuance is in accord with many letters in the past, which led to abandoning it We agree perfectly. In next issue you will find the prize winners of the March contest. These, you will remember, were the front covers, which are being appropriately framed before awarding to the lucky readers who won them.—Ed.

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29x5.00-19	2.85	1.25
30x5.00-20	2.85	1.25
6.25-17	2.90	1.35
28x5.25-18	2.90	1.35
29x5.25-19	2.95	1.35
30x5.25-20	2.95	1.35
31x5.25-21	3.25	1.35
6.50-17	3.35	1.40
28x5.50-18	3.35	1.40
29x5.50-19	3.35	1.45
6.00-17	3.40	1.40
30x5.00-19	3.40	1.40
31x6.00-19	3.40	1.45
32x6.00-20	3.45	1.55
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34x4½	3.45	1.45
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IN SUBSTANTIATION

Sirs:

Out of the depths of my mind arise "spottie" facts which gradually interweave to form substantial proof as to the possibilities of the happenings in "Terror Out of the Past" taking place in this present world. This proximity to realism and the satirical characterization of a would be dictator in the form of Lyman Kerwin is what holds the interest of the reader; for it is related so closely to present affairs in various parts of the world.

These "spottie" facts are ones which quite a number of persons are familiar with. Excavations throughout the world have not been thorough enough to establish any chance of not stumbling onto something as amazing as this story reveals. Even now alloys are being invented which are much better than previous alloys, and various kinds of robots are now in existence including those that produce vocal sounds, solve mathematical problems, and automatically work other machines. Finally, the shrinking of molecules uniformly is not unknown. Some savage tribes, head hunters, shrink heads.

The strong outstanding moral to the story is readily accepted and supported by the reader. Corrupt financial leaders quite often obstruct scientific progress, and dictators always do.

Sincerely yours,
ABRAHAM J. MELLITZ,
University of Connecticut,
Storrs, Conn.

Your editor also got the impression that this story, with its "wild" happenings was quite credible. And the fact that the story finally ranked second, just behind Black World, showed that we were right in presenting it to our readers.—Ed.

LIKES "IDEA" STORIES

Sirs:

You can tell when I like a tale because I corner everybody I can—friends, romance and countrymen—and tell it to them. This is the case with "Revolt of the Ants," a revolting title to an old-time science fiction follower (since '26), but a darned *ant*ertaining story! So far I have told it to my grandmother, my girl friend and a fellow fan. That Kaletskyarn was a miniature classic, and not a bit *anti*climatic!

Other top tales of the past twelve months, for my money, have been "A Scientific Pioineer" (cliches delightfully replaced by fresh expressions), "Ben Gleed, King of Speed" (something new, something different), "The 4-Sided Triangle" (a honey), "Missing Year" (one of Binder's best), "Wives in Duplicate" (make an interesting movie; excellently illustrated by Krupa) and Bloch's "Man Who Walked Through Mirrors" (guess everybody agreed on the merit of that one). As you may deduce from these titles, I prefer "idea" stories to action-stuff.

JACK ERMAN,
Hollywood, Calif.

You aren't the only one who likes "idea" stories, and whenever we secure one that ranks in this

(Concluded on page 138)

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At last you've printed a "classic"! "Black World" was the best story published in Ziff-Davis AMAZING STORIES, so far! It reached a terrific suspense-packed climax at the end of the first part, and the conclusion held me spellbound.

MARK REINSBERG,
3156 Cambridge Avenue,
Chicago, Illinois.

Glad you liked the yarn. We plan to present more two-part serials of this type, since they have proved immensely popular.—Ed.

SATIRICAL HUMOR

Sirs:

Three cheers! You finally got the brand of satirical humor into your magazine that it has always needed. I always liked A. W. Bernal's stories when they appeared several years ago. But this new attack is tops. Let's have more of this same type.

Sincerely,
RALPH EDWARDS,
100 West 55th
New York City.

MORE "SCIENCE FICTION"

Sirs:

"AMAZING STORIES" is steadily becoming less of a "fantastic adventure" magazine and more of a science-fiction mag. It may yet return to its once proud position at the top of its field.

"Hok Draws the Bow" is an exceptional story. Some such events may very well have occurred.

"Giants Out of the Sun" presents a quite incredible situation—and makes it seem real. Excellent writing.

"Adam Link" makes a good detective;—but when Eve comes charging in to save her "mate," for all the world like Bond's savage, very feminine "Priestess"! . . . after all, emotion is *not* a purely intellectual affair.

Hamilton "saves the world" again, as only he can do it. He is welcome back to "AMAZING STORIES," the "Contest Story" is good, but has me stumped. I can't account for the change in Worthey, from a short, pudgy youth to a tall, lanky one.

So the Editor of "AMAZING STORIES" has finally discovered the "amazing" fact that science-fiction fans *actually* like interplanetary yarns! Many kudos to Steber, whose story "Black World" brought about this "momentous" discovery. The announcement of forthcoming stories of this type is the biggest news in the magazine.

An article a month, by Ley and others, will be very welcome.

Best cover in a long time It presents a definite challenge to the imagination.

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. . . HELL TOOK COMMAND OF TOLUAH ISLAND!!

THE hurricane turned the skies inside out, drenching flame and deluge impartially across the lovely island of Toluah! Minutes passed . . . minutes of terror and madness . . . destruction and horror! The staunch palm against which Steve, Brenda and Moru were bound, bowed terrifyingly to the Gods of storm! Steve clutched Brenda close to him, tightly, pressed his lips to hers, the freshness and beauty of her intoxicating his mind . . . yet she remained unconscious!

Alternately Steve prayed and cursed! . . . prayed for Brenda to open her eyes . . . cursed at the thought of Shasu Koya, a yellow-bodied devil! But Moru was silent, lips tightly held together, eyes piercing through the drenching deluge toward the jungle . . . toward his native love, Hitani, and that fiendish Jap slaver, Koya, who held her captive! Here's an exciting story of the South Seas . . . 25,000 words that will hold you tense! Each magic sentence breathes of thrilling romance, intriguing adventure and rousing action! By all means, don't fail to read:

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★ **THE BUM WHO REFORMED—by William O'Sullivan.** When Bully Mahan came to Koluta, Williams really had to play the part of Tioni, the drunken native! Yes, Bully meant sure death to every white man in sight! . . .

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Kate Glaser, 452 Williams Ave , Brooklyn, N. Y., wants pen pals. . . . Henry Andrew Ackermann, 5200 Maple Ave., Baltimore, Md , wants correspondents interested in playing chess by mail and discussing stf. . . . Warren Ross, 731 S. Grand, West Springfield, Ill., would like to correspond with S-F fans between 15 and 18. . . . Robert McTyre would like correspondents of either sex, about 15 yrs., and will answer all letters promptly. . . . Frank Wilimczyk, Jr., 12 Dubois St , Westfield, Mass., has magazines for sale, 5c and up, and wishes to purchase cartoons; list your prices. . . . Vivian Crosby, 3333 Blanchard St , Toledo, Ohio, is desirous of pen pals between 19 and 24, but will answer letters from persons of any age; 21 yrs. . . . Morris Bush, 570 W. 156th St., N. Y. C , will accept reasonable offer for his early copies of AMAZING STORIES. . . . Hans. K. Weiss, 102 Beech St., Paterson, N J., wants correspondents interested in chemistry. . . . Clinton Constantinescu, 3472 W. 58th St., Cleveland, Ohio, would like to examine back issues of AMAZING STORIES, 1932 through 1933. Anyone living in Cleveland and wishing to comply, get in touch with him. . . . June Glidewell, 2006 Rainier Ave., Everett, Wash., wants to hear from both sex, anywhere, about anything; 22 yrs. . . . Genevieve Baird, 2006 Rainier Ave , Everett, Wash , is desirous of hearing from either sex around 40 yrs. . . . Donald A. Dow, 617 Eggert Rd., Buffalo, N. Y., wants pen pals in U. S A. and foreign countries interested in S-F, match book covers, etc. . . . Louis Rabinovitz, 2635 N. Hampden Ct , Chicago, Ill., wants to get in touch with a fan club in Chicago; 15 yrs. . . . Mark Reinsberg, 3156 Cambridge Ave., Chicago, Ill , has for sale first edition of *The Moon Pool* and *Weinbaum Memorial Volume*, $4 each. . . . Eric Rolaff, Moon Valley Farm, Flat, Mo., wants to sell or trade POPULAR AVIATION magazines for S F Magazines dating before 1938; all in good condition . . . Richard Dade, 139 S. Main St., Henderson, Ky., would like to trade or sell S-F magazines . . . James Geddes, 62, Craigie Ave., Craigiebank, Dundee, Scotland, would like foreign correspondents about 16 yrs , both sexes, who are readers of AMAZING STORIES. . . R G. Gardner, 27, Frogmore Road, Milton, Portsmouth, Hants, England, is desirous of American pen pals. . . . Robert DeLong, R. 1, Newburgh, N. Y., has S-F magazines for sale. . . . Fred Senour, 210 Alameda St., Rochester, N. Y., will sell his collection of S-F magazines at cost price; rare copies in good condition. . . . Raymond F. Lawrence, 202A Cleasant St., Worcester, Mass., would like to correspond with those interested in books especially. . . . Clyde E. Gallagher, 3741—6th Ave , Sacramento, Calif., would like to hear from S-F fans near Sacramento, between 21 and 30. . . . Paul H. Klingbiel and Donn Brazier, would like to hear from those interested in forming The Frontier So-

(Concluded on page 142)

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ciety for active fans; 627 S. 7th Ave, West Bend, Wisc. . . . Jack T. Collette, Bean Station, Tenn, wants correspondents actively interested in Television, anywhere. . . . Allan Keniston, Jr., Vineyard Haven, Mass., would like to obtain the August, 1936, issue of a magazine containing "Enslaved Brains." . . . Fred Claassen, 978 Woodycrest Ave., Bronx, N. Y., has for sale Science Fiction Magazines in good condition. . . . Robert Sternberg, Student Mail, N. Y. U., University Heights, N. Y., wants correspondents, either sex, interested in radio, X-ray, radio-activity, etc. . . . Harry Schmarje, 318 Stewart Rd., Muscatine, Ia, has S-F magazines in good condition for sale; also wants pen pals and will answer letters promptly. . . . John Cunningham, 2050 Gilbert St., Beaumont, Tex., would like local and foreign pen pals interested in S-F. . . . Robert Wise, 642 Evergreen, Youngstown, Ohio, 17 yrs., wants pen pals from Britain especially, interested in stamp-collecting, science, S-F and hitch-hiking . . .

Edward Landberg, 1650 President St., Brooklyn, N. Y., has for sale complete collection of S-F magazines, etc.; those interested enclose stamp and prices will be quoted; prospective buyers should list alternate items. . . . J Burrell, 27 Fircroft Rd., Hook Bise, Surbiton, Surry, England, 14 yrs., would like to hear from pen pals. . . . Dorys Wainwright, 39 Fernshaw Rd., Chelsea, London, S.W. 10, England, is desirous of female pen pals, anywhere, any age. . . . Bert F. Castellari, 10a Sully St., Randwick, Sydney, N.S.W. Australia, would like new fans in Australia to join The Futurian Society of Sydney; this is especially slanted toward Alan Connell. . . . Steve Belinski, Freeport Sanatorium, Kitchener, Ontario, Canada, would like to hear from readers interested in stamp collecting, he's lonesome and would appreciate receiving stamps. . . .

QUIZ ANSWERS

(Quiz on page 132)

A Matter of Choice

(1) Two	(5) Three	(9) Three	(13) Four
(2) Three	(6) Three	(10) Four	(14) Four
(3) One	(7) One	(11) Three	(15) One
(4) Four	(8) One	(12) Two	

WHO IS HE?

1—Charles Darwin.
2—Joseph Henry.
3—Isaac Newton.
4—Blaise Pascal.
5—Antoine Lavoisier.

MATCH THESE!

1—J	4—A	7—C	10—B	13—H
2—K	5—F	8—I	11—D	14—E
3—O	6—M	9—N	12—L	15—G

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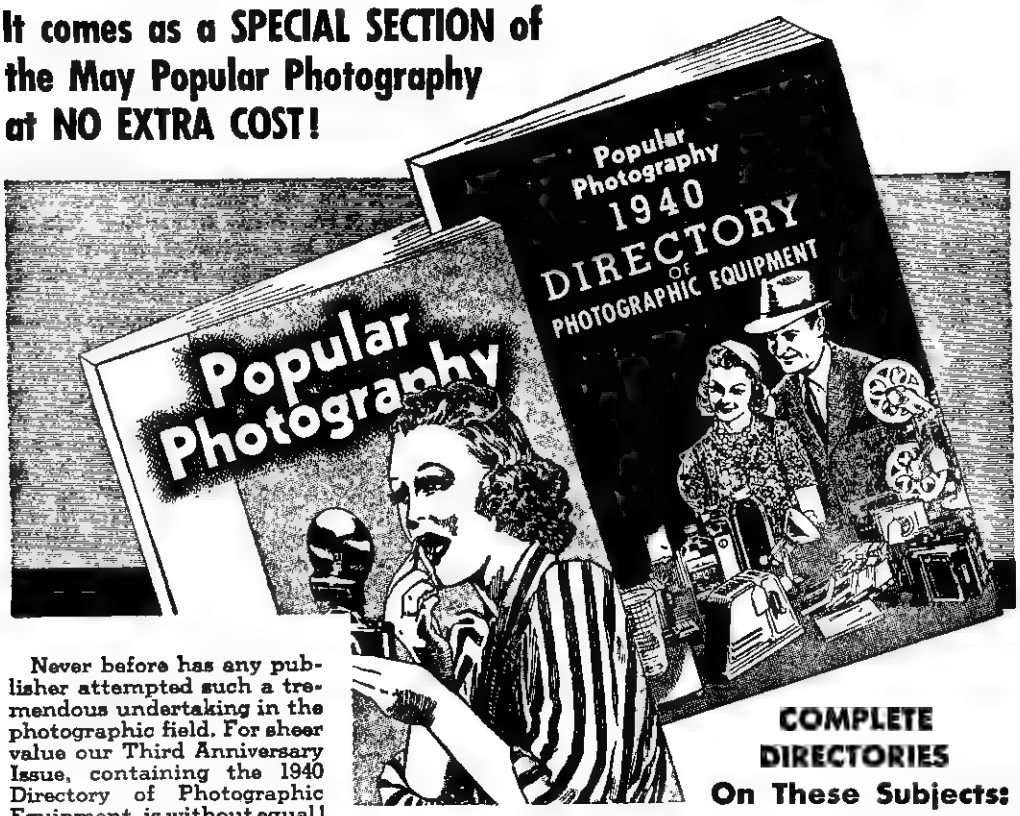

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WHEN METEORITES CRASH

By HENRY GADE

(See back cover painting by Julian S. Krupa)

The possibility of death from the skies is one that really exists. In the past, great masses have plunged down, and will again in the future

THIS month, on the back cover, AMAZING STORIES presents artist Julian S. Krupa's conception of what might happen to a great city like New York, if a giant meteorite were to fall into the ocean nearby.

He has pictured a great tidal wave engulfing the buildings, smashing them down in a watery orgy of destruction. He has also depicted still another fragment plunging down, to add to the destruction.

This conception is not far from the actual truth. The Norse races have a legend of the *Ragnarok,* the two-headed serpent of fire that came out of the sky and laid waste the earth. Astronomers have long thought this legend to be the story of a great meteorite, or perhaps even a comet, which struck the earth.

Smaller meteorites have been observed to divide, to explode, during their flight through the atmosphere. The *Ragnarok* might have been such a meteorite, of giant size, which broke in two.

Whether or not this ancient legend is really a story of the coming of a meteorite, it is certain that Earth has been repeatedly visited by such visitors of catastrophic size. The most notable of all these is the famous meteor crater found in Canyon Diablo in Arizona. Here we find a huge crater three quarters of a mile in diameter, with an up-flung rim of debris circling it, just as the craters visible on the moon appear. Many tons of meteoric iron have been found in this crater, and around it. A large mass has not been recovered, since it appears that the visitor from space either entirely shattered upon impact, or burrowed its way deeply underground on a tangent, and hence has not been located.

Another, and more recent meteorite is the one in Siberia, which leveled trees in a great circular area about its center, all pointing away from the crater with great regularity, as though this particular meteorite descended exactly from the vertical.

Aviators, flying over the Carolinas, photographed the area, and found to their intense amazement, that they had recorded a large number of giant craters of incredibly ancient origin, as though hundreds of giant meteorites had struck the earth in the area.

With all these instances in mind, we can be certain that earth has been visited by the iron hammer of Thor very often, and most certainly will be visited again and again in the future. When the next of these dread visitors from the void crashes down on our planet, will it be in the vicinity of a densely populated city?

The horror of this suggestion is immediately apparent. No war could possibly cause such a great loss of life. A city such as New York could be wiped out in a matter of minutes—even of seconds, and ten million lives snuffed out with one stroke.

Let us say that we are an observer located in New York. We are staring at the sky from the top of a huge skyscraper. We admire the moon, which is full. Suddenly we see a tiny star which wasn't there a moment ago. We stare at it in surprise, because it is moving. How can a star move? Not even the planets move that fast. We can see it progress visibly. What can it be?

We are actually seeing the sunlit side of the approaching object, which is not illuminated by any incandescence of its own.

It grows larger We start nervously to our feet. There is a sense of something impending. Abruptly we *know* that terror and disaster are bearing down on us out of space, for suddenly, the object is no longer a star, but a great glaring ball of fire, bursting out into almost instant pyrotechnics with the meteorite's advent into our atmosphere.

It is traveling at a tremendous speed, anywhere from twenty-five to a hundred miles a second. It flashes down for one-two-three brief seconds, bathing the whole city and the sea, and the country behind us in a brilliant red and yellow and finally white glow. We are blinded by the brilliance. A terrible silence still envelops us, and we are held spellbound by the noiselessness of this terrific thing that is happening. In the same silence, the glowing terror divides into two pieces. The first, and largest plunges into the ocean a hundred miles out. Then, at last, we hear the first thin scream, the rapid descent to a roar, and finally an awful thundering as the sound of tortured atmosphere comes to our ears.

Unbelievably, rushing across the ocean, comes a tidal wave of water that sweeps ships before it like corks. The buildings at the shore are engulfed in foam. They collapse like houses of cards.

We are petrified with fear. The water rushes down on us. It engulfs us. As we feel the building fall beneath our feet, we see the final fragments of meteorite plunge into the sea. All goes black. Thor's hammer has fallen again!

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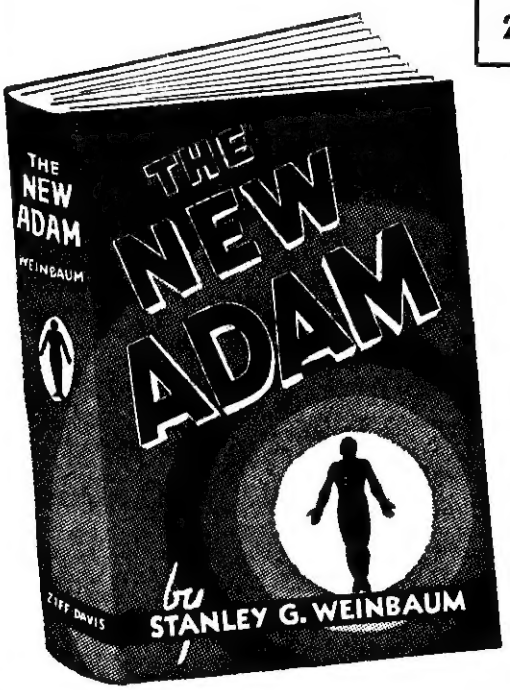

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WARLORDS OF MARS

(Concluded from page 63)

view of the rout of Usulor's first army, I noted the cadences of the flutes and whistles used to command the flies. As a result, when I got into the broadcasting station I was able to broadcast notes that vibrated the tiny brains of the flies. I gave them feelings of intolerable suffering and of rage. In fury, the flies poured out of the holes and stung to death the nearest men. In nearly every case they were Sommalu's soldiers."

"And how did you escape the gas?"

"There was no gas. The soldiers to whom Sommalu sent the order to release the gas were dead, poisoned by their own flies."

"Ah!" said the general, with a sigh of satisfaction. "Now all that remains is the cleaning up. We must make sure that no more incipient Sommalus are growing up in this disorderly country."

"Yes," said the scientist, as they went out together, "we must institute a universal register, catalog and examine—"

That left Don and Wimpolo alone. The giantess was not looking at him. She was lying languidly on a couch, affectionately tickling the ears of her snake, which, too overfed to coil itself up, lay stretched out straight and gazed at her in mute suffering.

An odd doubt came to Don. Was the part that he, the Earthling, had played in the suppression of the revolt properly appreciated? Wimpolo had promised him that one day he would be her consort and King of all Mars. Now she seemed to have forgotten.

He decided it was best not to remind her. Otherwise, hearing that he had such ambitions, the scientists of Mars might start inquiring into the size of his adrenal glands, and perhaps remove one of the pair to make him properly docile and safe. He certainly didn't want that, for how would he have got on against Sommalu if he *had* been docile and peaceloving?

Shaking his head in puzzlement, Don Hargreaves went out from the presence of the heir to the throne of Mars.

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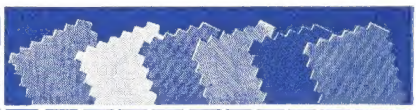

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WHEN METEORITES CRASH!

Every day thousands of meteorites bombard the earth. Most of them are tiny and harmless, but some have been huge. Meteor Crater, in Arizona, was caused by one of these. Another devastated an enormous region in Siberia. The Carolina craters are the remains of an ancient meteorite fall. What if such a meteorite, or meteorite swarm, was to fall in the vicinity of a large city? What if one fell into the ocean off New York? The catastrophe that would result would be one of the most terrible in history . . . (See page 144 for complete details.)